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GODDARD SPACE FLIGHT CENTER GREENBELT, MARYLAND, U.S.A. 20771 PROJECT OPERATIONS BRANCH, CODE 513

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## SATELLITE SITUATION REPORT

**VOLUME 25, NUMBER 3** 

**DECEMBER 31, 1985** 

manmade objects orbiting the Earth's surface to be detected; therefore, the Satellite Situation Report cannot include all which have previously orbited the Earth. Satellite Situation Report is a listing of those satellites currently in orbit and those ch have previously orbited the Earth. Some objects are too small or too far from the

Generally, satellites are classified as follows:

a. Payloads:

Situation Report, i.e., 1982 087A. and there is no one source which indicates the operational status of all payloads and/or experiments. This class of objects is the first listed in the Satellite Payloads may contain one or more functioning or nonfunctioning experiments. Usually only the owners of the satellites know if the experiments are functioning,

b. Other objects:

the second item listed is the rocket body). than rocket bodies. It is the second object identified in the Satellite situation report listing after the payload, i.e., 1982 087B (when a platform is not used, Platforms are used to support a payload while it is being placed into orbit. A platform may remain in orbit long after its purpose is served, usually longer

short time after the payload and platform have achieved orbit. usually the third object listed in the Satellite Situation Rocket bodies are used to place the payload and platform (if one is used) into orbit. Some launches may have more than one rocket body because of the payload payload, i.e., 1982 087<u>C</u>. weight or the type of orbit or experiment. Most rocket bodies decay within a Satellite Situation Report Rocket bodies are

placed into free space from manned orbiting spacecraft during operations. Debris is detected by its size and distance from the Earth. Debris objects are the last listed in the Satellite Situation Report, i.e., 1982  $087\underline{p}$ , 1982  $087\underline{e}$ , 1982  $087\underline{e}$ . separated from the payload, when rocket bodies disintegrate, or when objects are Debris in orbit occurs when parts (nosecone shrouds, lens or hatch covers) are

others. Certain groups of satellites, by the nature of their function, have similar inclination, such as geosynchronous The Satellite Situation Report does not attempt to classify payloads by experiment or functions, periods, and apogees. satellites, communications satellites, Earth resources,

are located speed the surface of the Earth moves in relation to the Sun. Elements for these satellite types vary close to Equator because they orbit at approximately the same apogee and perigee, inclinations satellites orbit approaching 1,440 minutes. These Communications satellites are usually geosynchronous. Geosynchronous satellites have almost equal above the period of almost directly degrees, and a

Although some are in geosynchronous orbit, most weather satellites have almost equal apogee and perigee, inclinations approaching 90 degrees, and a 90-minute period of orbit (they orbit the Earth once for each 15 degrees of Earth rotation). Weather satellites are only and perigees of Earth resources satellite. Others in the Earth resources category map the locaorbit that are very divergent, and the period of orbit can range from 400 to 700 minutes. a 90-minute period of tion of minerals, water, and vegetation. These satellites may have apogees one type

Certain terms used in the Satellite Situation Report are defined as follows:

Object was launched from Earth and was last known to be in orbit around cannot be confirmed Mars, but its orbit AREOCENTRIC

Object was launched from Earth and was last known to be orbiting around a mass in space, but its orbit canot be confirmed BARYCENTRIC

Object was launched from Earth and elements are not available NOT AVAILABLE ELEMENTS

European Space Agency ESA European Space Research Organization

ESRO

Federal Republic of Germany FRG Object was launched from Earth and was last known to be in orbit around HELIOCENTRIC

the Sun, but its orbit cannot be confirmed

Object was launched from Earth but was not in orbit long enough to establish elements before it decayed into the Earth's atmosphere INITIAL ELEMENTS NOT AVAILABLE

North Atlantic Treaty Organization

NATO

PRC

Peoples Republic of China

and was last known to be in orbit around be confirmed. Object was launched from Earth the Moon, but its orbit cannot SELENOCENTRIC

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United Kingdom

SATELLITE SITUATION REPORT

VOLUME 25, NO. 3

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NASA/GODDARD SPACE FLIGHT CENTER
GREENBELT, NARYLAND, U.S.A. 20771

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SATELLITES BEING MONITORED BY THE SPACEFLIGHT
TRACKING AND DATA NETWORK.

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SPACE OBJECTS BOX SCORE

INTER-			- 08JECT	OBJECTS IN ORBIT	#					
DESIGNATION	NAME	CATALOC NUMBER SO	SOURCE L	LAUNCH	PERIOD MINUTES	NATION	AROCES KN.	PERTOES KM.	FREQ. (MHZ)	NOTES
1958 LAUNGHES	£\$									
			HS 1	1.7 MAD	139 0					
BETA 2	VANGUARD 1	1576		ŀ	133,5	34.2	3897	653		
1959 LAUNCHES	E-S									
ALPHA 1	VANGUARD 2		1	7 560	3 3 3	) )	•	•		
ALPHA 2					128.1	32.9	3519	550		
1011	- 1			438	137.6	23.2	3524	418		
IUIA I	EXPLORER 7	22			99.7	50.3	948	538		
•	LUNA 1	- [	USSR	2 JAN	701 13H		656	479		
*	PLONEER 1	İ		- 1	HELIOCENTRIC	1	CROLL			
1960 LAUNCHES	.S									
ALPHA 1	PIONEER 5		<b>US</b>	HAR	HELIOCENTRIC	ł	CRRIT			
BETA 1	TIBDC 1		SS	1 APR	97.0		629	602	0	
BETA 4			Sr	APR	99.1	<b>8</b> .2	759	621	F F	
ETA 2	GREB			ZUX X	100.7	26.7	1012	610	00• ∤NI	
ETA 4		840	33	ı			981	607		
CT & 6					33	66.7	906	# U		
10TA 2			US 12		118.1	47.2	1685	1502	iəa Iau	
		52			CURRENT	ELEME	NTS NOT MAINTAINED	AI NED	(LL)	
. E	COURTER 18		SU	000	107.1	28.3	1215	1633	_	
1 1X	EXPLORER 8	-	2 & &	- 1	106.3		1209	2		
PI 1	- 1			- 1	90.9	400	355	285		
7	11702 4	63 US	US 23	NOV	97.3	48.5	668	585		
PI 4					95.5	48.5	566	519		
1961 LAUNGHES	<b>5</b>	3365	1	1	1051	\$	1038	974		
GARRA 1	VENERA 1	86 USS	58 12	7	HEL IOCENTOIC	ĺ	0017			
DELTA 2			•		118.1		2545	641		
(		3927 US			113.2	38.9	2138	609		
•	EXPLORER 11			A 68	113.5		2169	607		
			5 27		97-1	28.8	208	184		
							900	1		

INTER		CATALOG			PER100	INCLI	APOGEE	DERICEE	TRANSMITTING	
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	KM.	KA.	FREG. (MHZ)	NOTES
1961 LAUNCHES	(CONT.)									
1	TRANSIT 4A	116	sn:	29 JUN	103.6	8.99	988	872 873		
DMICRON 3 - 271	1N JUN-58-3 271		Sn	[ 1	<u> </u>	NOTE	1*	700		<b>±</b>
ONICRON 23		138	SI	-1	103.7	7-79	653	900		
39	1	154	Sn	29 JUN	103.1	66.7	971	730		
RHO 1	TIROS 3	165	S	1 1	99.2	6.7.9	642	<b>\$69</b>		
		166	SII	ı	8498	48.0	659	555		
		167	S	12 JUL	101.7	47.9	914	1966		
-	MIDAS 3	163	4:		1,141		35.29	3326		
SIGMA 3		188	S 2	12 JUL 12 JUL	161.8	91.5	3567	3349		
CHA A	MIDAS A	192	Sn	21 001	165.9	95.8	3761	3484		
٠ ٦		104	S	120 17	165.5	95.8	3823	3389		
A DELTA 4		195	SN		166.3	95.9	3875	3403		
051 TA		2009	Sh	1	165.7	95.8	3132	36.48		
A DELTA 6		2371	S	21 OCT	165.3	95.9	1001	2007 480		
	TRANSII 48	202	Sh		90.	1	1100	956		
~	TRAAC	205	SO	NOV ST	105.2	32.4	1098	951		
A ETA 3		10796	S	15 NOV	105.8	32.4	1109	926		
1962 LAUNCHES						,				
ALPHA 1 RA	RANGER 3	221	Sn	26 JAN	HEL 10	Ι.	ORBIT			
,		222	34	1	MELTO	1		3		
	TIROS 4	226	S	80 4 20 7 11 11 11 11 11 11 11 11 11 11 11 11 11	100.1	48.3	825 912	689		***************************************
1		228	Sn	1 -	98.6	48.4	715	899		
DETA A		229	SII	- 1	99.0	A8.3	753	663		
KAPPA 1		271	Sn	9 APR	152.9	86.7	3471	2786		
KAPPA 3		273		1	183.2	86.7	3419	2797		
KAPPA 4		282	50	23 APR	HELTO		DRBIT			
A ALPHA 1 T	TIROS 5	309	SO		99.66	58.1	914	586 22 42 42		
ALPHA 2		416	Sil	NITE	100.7	58.3	1002	583		
A ALPHA 3		212	51		8 48	58.0	683	526		
ALDIA A	TEL CTAP 1	340	ns	1	157.8	44.8	5642	146		
A EPSILON 2	- 1	341	SII	1	157.6	848	5621	202		
A DMICRON 1		369	Sn	-	98.7	9.0	785	571		
		378	31	23 AUG	2 7 0	98.6	726	569		
RON 4	1	388	<u>د</u> د	23 AUG	HEI IT	. 1	DEBIT			
BHO 1	MARINER 2	375	Sn		HELIC		ORBIT			
,	4 SUBI	397	Sh	- 1	98-1	58.3		253		
· M		399	S O	18 SEP	98.3	78. 4. 4.	4 1 4 4 9 6	689		
PSI 4		424	1	29 SEP	105.3	80.5	1025	066		
B ALPHA 1 A	ALUUEIIE 1	171		۰	105.3	80.5	1020	488		

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RANGER 5 19 US 29 SEP 105.2  RANGER 5 19 US 20 CCT CURRENT 19 US 10 CCT HELTOCK 1 10 CCT HELTOCK 1 10 CCT 107.0  1 EXPLORER 15 140 US 27 OCT CURRENT 16 10 US 10 DEC 104.2  EXPLORER 16 506 US 10 DEC 104.2  EXPLORER 16 506 US 10 DEC 104.2  FRANSIT 5A 553 US 14 FEB CURRENT 16 553 US 19 DEC 95.8  SYNCOM 1 555 US 10 DEC 95.8  FRES 6 608 US 10 DEC 95.8  FRES 10 607 US 10 DEC 95.8  FRES 10 608 US 10 DEC 100.7  FRES 10 608 US 10 DEC 95.8  FRES 10 608 US 10 DEC 100.7  FRES 10 608 US 10 DEC 95.8  FRES 10 608 US 10 DEC 100.7  FRES 10 608 US 10 DEC 95.8  FRES 10 608 US 10 DEC 10 DE	ATMED	NOT MAINTAINED	THENTS	CURRENT	_		S	0			
RANGER 5 101 US 27 SEP 105.2 80.5 1016  RANGER 5 144 US 2 0CT CURRENT ELEMENTS NOT HAINTAINE 1 ENTRY 1 1031 1031 1031 1031 1031 1031 1031 1	883	1087	f		2		•	427			1963
RANGER 5 100 29 SEP 105-2 80.5 1016  RANGER 5 143 US 2 0CT CURRENT ELEMENTS NOT MAINTAINE 140 US 18 0CT HELIOCENTRIC ORBIT 1440 US 21 8 0CT 107-6 80-1 1123 1123 1144 US 21 8 0CT 107-6 80-1 1123 1123 1144 US 21 8 0CT 107-6 80-1 1123 1123 1144 US 21 8 0CT 107-6 80-1 1123 1123 1144 US 21 8 0CT 107-6 80-1 1123 1123 1144 US 21 8 0CT 107-6 80-1 1123 1123 1144 US 21 8 0CT 107-6 80-1 1123 1123 1144 US 21 8 0CT 107-6 80-1 1123 1123 1144 US 21 8 0CT 107-6 80-1 1123 1146 US 21 8 0CT 107-6 80-1 1143 1144 US 21 8 0CT 107-6 80-1 1143 1144 US 21 8 0CT 107-6 80-1 1143 1144 US 21 8 0CT 107-6 80-1 1144	1065	1127	89.9	•	יי די	, r	5 0	12042		1	<b>1</b>
RANGER 5 1910 US 20 SEP 105-2 80.5 1016  RANGER 5 1910 US 18 OCT CURRENT ELEMENTS NOT MAINTAINE 15 10 OCT 107-6 50.1 1167  EXPLORER 15 140 US 18 OCT 107-6 50.1 1167  EXPLORER 16 500 US 13 DCC 107-6 50.1 1167  EXPLORER 16 500 US 13 DCC 107-6 50.1 1167  EXPLORER 16 500 US 13 DCC 107-6 50.1 1167  EXPLORER 16 500 US 13 DCC 107-6 50.1 1167  EXPLORER 16 500 US 13 DCC 107-6 50.1 1167  EXPLORER 16 500 US 13 DCC 107-6 50.1 1167  EXPLORER 16 500 US 13 DCC 107-6 50.1 1167  EXPLORER 16 500 US 13 DCC 107-6 50.1 1167  EXPLORER 16 500 US 13 DCC 107-6 50.1 1167  EXPLORER 16 500 US 13 DCC 107-6 50.1 1167  EXPLORER 16 500 US 19 DCC 95-8 90.6 567  EXPLORER 17 500 US 10 DCC 95-8 90.6 567  EXPLORER 18 553 US 14 FEB CURRENT ELEMENTS NOT MAINTAINE 10012  EXPLORER 19 US 10 DCC 95-8 90.6 567  EXPLORER 19 US 10 DCC 10 DCC 95-8 90.6 100.6 567  EXPLORER 19 US 10 DCC 10 DCC 95-8 90.6 100.6 567  EXPLORER 19 US 10 DCC 10 DCC 95-8 90.6 100.6 567  EXPLORER 19 US 10 DCC 10 DCC 95-8 90.6 100.6 567  EXPLORER 19 US 10 DCC 10 DCC 95-8 90.6 100.6 567  EXPLORER 19 US 10 DCC 10 DCC 95-8 90.6 100.6 567  EXPLORER 19 US 10 DCC 10 DCC 95-8 90.6 100.6 100.6 567  EXPLORER 19 US 10 DCC 10 DCC 95-8 90.6 100.6	8601			١	500	) r	= (	3166		3 0386	1963
RANGER 5 130 US 20 SEP 105.2 80.5 1016  RANGER 5 130 US 20 CI CURRENT ELEMENTS NOT MAINTAINE  ENPLORER 15 140 US 18 DCT INCLUDENTIAL DRBIT  ANNA 18 147 US 21 DCT 107.6 50.1 1167  1 RELAY 1 503 US 13 DCC 108.1 17.5 17.5  EXPLORER 16 50.0 US 13 DCC 108.1 17.5 17.5  EXPLORER 16 50.0 US 13 DCC 108.2 52.0 1167  TRANSIT 5.4 50.0 US 13 DCC 108.2 52.0 1167  TRANSIT 5.4 50.0 US 13 DCC 108.2 52.0 1167  TRANSIT 5.4 50.0 US 13 DCC 108.2 52.0 1167  TELSTAR 2 573 US 14 FEB CURRENT ELEMENTS NOT MAINTAINE  LUMA 18 100 US 19 DCC 95.8 90.6 567  TELSTAR 2 573 US 14 FEB CURRENT ELEMENTS NOT MAINTAINE  LUMA 18 100 US 19 DCC 95.8 90.6 567  TELSTAR 2 573 US 14 FEB CURRENT ELEMENTS NOT MAINTAINE  LUMA 18 100 US 19 DCC 95.8 90.6 567  TELSTAR 2 573 US 14 FEB CURRENT ELEMENTS NOT MAINTAINE  LUMA 18 100 US 19 MAY 166.4 81.4 36.7 36.7  ERS 10 US 9 MAY 166.4 81.4 36.7 36.7  ERS 10 US 10 JUL 167.8 80.4 37.1 37.1  ERS 10 US 10 JUL 167.8 80.4 37.1 37.1  ERS 10 US 10 JUL 167.8 80.4 37.9 38.1  ERS 10 US 10 JUL 167.8 80.4 37.9 38.1  ERS 10 US 10 JUL 167.9 80.4 37.9 38.1  ERS 10 US 10 JUL 167.0 80.4 37.9 38.1  ERS 10 US 10 JUL 167.1 80.4 37.9 38.1  ERS 10 US 20 SEP 107.2 89.9 1125 100.4 1	1004	1074		•	SED.	96	  -	2097		3 0385	1963
RANGER 5 100 29 SEP 105-2 80.5 1016  RANGER 5 1430 US 2 DCT CURRENT ELEMENTS NOT MAINTAINE 15 10 10 10 10 10 10 10 10 10 10 10 10 10		1004	80 0	7	9	28	Su	745		3 038E	1963
PANGER 5 130 US 2 SEP 103-2 80.5 1016  PANGER 5 130 US 2 18 BGT CURRENT ELEMENTS NOT MAINTAINE 2 18 BGT COURTENT ELEMEN	100		90 0		556	j	F	672		9988	195
PANGER 5 1932 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1932 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1932 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1932 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1932 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1932 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1932 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1932 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1932 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1932 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1932 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1932 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1934 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1934 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1934 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1934 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1934 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1934 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1934 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1934 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1934 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1934 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1934 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1934 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1934 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1934 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1934 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE LENGTH 1 1934 US 2 OCT CURRENT ELEMENTS NOT MAINTAINED LOSS US 2 OCT CURRENT ELEME	1065	1125	89.9	107.2		28	S	671	w	53 038C	1963
PANGER 5 191 US 2 SEP 105.2 80.5 1016  PANGER 5 193 US 2 OCT CURRENT ELEMENTS NOT MAINTAINE 2 SEP 105.2 80.5 1016  PANNA 10 S 20 CT CURRENT ELEMENTS NOT MAINTAINE 2 SEP 10 CT 107.6 50.1 1165 1  PERFORMER 16 506 US 27 DCC CURRENT ELEMENTS NOT MAINTAINE 2 SEP 10 CT 107.6 50.1 1165 1  PERFORMER 16 506 US 10 DCC 104.2 52.0 1167 1167 1167 1167 1167 1167 1167 116	1066	1127	80 0	107.3	ı	1.00	<b>4</b>	676	1		3
RANGER 5 1010 US 27 SEP 105-2 80.5 1016  RANGER 5 1490 US 10 OCT CURRENT ELEMENTS NOT MAINTAINE 1 EXPLORER 15 1450 US 27 OCT CURRENT ELEMENTS NOT MAINTAINE 2 NNA 10 US 27 OCT CURRENT ELEMENTS NOT MAINTAINE 2 NNA 10 US 27 OCT CURRENT ELEMENTS NOT MAINTAINE 2 NNA 10 US 27 OCT CURRENT ELEMENTS NOT MAINTAINE 2 NNA 10 US 27 OCT CURRENT ELEMENTS NOT MAINTAINE 2 NNA 10 US 13 DEC 105-2 50-1 1165 1  EXPLORER 16 506 US 10 DEC 105-2 52-0 1167 1  EXPLORER 16 506 US 10 DEC 105-2 52-0 1167 1  EXPLORER 16 506 US 10 DEC 95-8 90.6 567 1  EXPLORER 16 509 US 19 DEC 95-8 90.6 567 1  EXPLORER 16 509 US 19 DEC 95-8 90.6 567 1  EXPLORER 16 509 US 14 FEB CURRENT ELEMENTS NOT MAINTAINE 1 DEC 105-2 573 US 14 FEB CURRENT ELEMENTS NOT MAINTAINE 1 DEC 105-2 573 US 14 FEB CURRENT ELEMENTS NOT MAINTAINE 1 DEC 105-2 573 US 14 FEB CURRENT ELEMENTS NOT MAINTAINE 1 DEC 105-2 573 US 14 FEB CURRENT ELEMENTS NOT MAINTAINE 1 DEC 105-2 573 US 14 FEB CURRENT ELEMENTS NOT MAINTAINE 1 DEC 105-2 573 US 14 FEB CURRENT ELEMENTS NOT MAINTAINE 1 DEC 105-2 573 US 14 FEB CURRENT ELEMENTS NOT MAINTAINE 1 DEC 105-2 573 US 14 FEB CURRENT ELEMENTS NOT MAINTAINE 1 DEC 105-2 573 US 14 FEB CURRENT ELEMENTS NOT MAINTAINE 1 DEC 105-2 573 US 14 FEB CURRENT ELEMENTS NOT MAINTAINE 1 DEC 105-2 573 US 14 FEB CURRENT ELEMENTS NOT MAINTAINE 1 DEC 105-2 573 US 14 FEB CURRENT ELEMENTS NOT MAINTAINE 1 DEC 105-2 573 US 15 UN 95-3 45-3 45-3 45-3 45-3 45-3 45-3 45-3 4	1065	1108	89.8	107.0		28	S	669			1963
PANGER 5 101 US 27 SEP 105.2 80.5 1016  PANGER 5 130 US 10 GCT CURRENT ELEMENTS NOT MAINTAINE  PANGER 15 140 US 10 GCT HELIOGENERIC GRB1T  144 US 10 GCT HELIOGENERIC GRB1T  145 US 12 GCT CURRENT ELEMENTS NOT MAINTAINE  2 ANNI 10 10 10 10 10 10 10 10 10 10 10 10 10	271	2024		119.3		26	5	625		- 1	1
RANGER 5 1010 US 27 SEP 105-2 80.5 1016  RANGER 5 1030 US 20CT CURRENT ELEMENTS NOT MAINTAINE  ANNA 18 10 US 10 DCT CURRENT ELEMENTS NOT MAINTAINE  ANNA 18 10 US 27 DCT CURRENT ELEMENTS NOT MAINTAINE  ANNA 18 10 US 27 DCT CURRENT ELEMENTS NOT MAINTAINE  ANNA 18 10 US 27 DCT CURRENT ELEMENTS NOT MAINTAINE  ANNA 18 10 US 31 DCC 107-0 50-1 1165 1  10 RELAY 1 503 US 13 DCC 107-0 50-1 1165 1  EXPLORER 16 506 US 13 DCC 107-2 52-0 1167  FRANSIT 5A 509 US 19 DCC 95-8 90-6 567  FRANSIT 5A 5	AINED	NOT HAINT		CURRENT		26	SU	634	_		1963
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105.2 80.5 1016  511 US 29 SEP 105.2 80.5 1016  105.2 80.	TATUSD	F	Ē		1		Ę	45		- 1	4
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	99	1016	80 <b>.</b> 5	105.2			S	010		AL DUA	,

NATIONAL DESIGNATION

NAME

NUMBER SOURCE

LAUNCH

MINUTES NATION

ADOCES.

REQ. (HHZ)

NOTES

BONECLS IN BUBBLE

1962 LAUNCHES (CONT.)

SI BAA JAMBIRO SUBLITY BOOK GOLLITY

		30.80	OBJECTS IN ORBIT	111					
INTER-	CATALOG			PERIOD	1 NC1 1-	APOGEE	PERIGEE	TRANSMITTING	
DESIGNATION NAME		SOURCE	LAUNCH	MINUTES	NATION	км.	KH.	FREQ.(MHZ)	NOTES
1963 LAUNCHES (CONT.)									
	\$69	Sh	27 NOV	105.8	30.4	1589	424		3#
049A	703	sn		106.7	0.06	1085	1060		
- 1	705	Sn	S DEC	106.9	0.06	1109	1060		
	715	S S	1	106.2	0.06	1076	1026		
1	2432	S		106.9	0.06	1109	1060		
	721	Sn:	1	115.4	78.6	2345	598		
l l	724	SS		111.7	78.7	1969	638		
	732	Sn	19 DEC	112.0	78.7	1987	650 645		
1963 054A TIRUS 8	716	S	21 DEC	98.9	58.5	729	678		
1963 054C	720	Sn	i	100.5	58•5	₩88	678		
1964 LAUNCHES									
001A	727	Sn	11 JAN	103.3	6.69	927	905		
0010	729	S	11 JAN	103.3	69.69	928 926	901 902		
i	731	SS	11 JAN	103.3	6.69	926 829	901		
1964 0028	734	Sn	1	101.0	0.66	818	794		

902	100	106		901	176	194	795	1998	1996	1041	1035	1032	404	9372	403	9597	386	384	381		dage dage	857	731	844	847	919	818	
927		976	48	956	829	818	B22	7503	7510	1300	1295	1297	6767	59050	5481	59926	4199	3918	4167	ORBIT	916	922	845	626	931	407	A26	
6.69	5050	6.69	8189	6.69	99.0	99.0	99.0	46.4	46.4	81.5	81.5	81.5	60.8	6.99	60.9	67.3	60.8	8.09	8009		90.5	0.06	90°B	90.5	90.5	90.5	8.00	
103.3	103.4	103.3	103.3	103.3	100.9	101.0	101.1	194.7	194.8	108.8	108.7	108.7	165.0	1356.4	149.3	1386.1	133.9	130.7	122.3	HELID	102.5	102.8	100.6	102.7	102.8	98.6		
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127	128	129	730	731	733	736	7.7	717	926	74.7	747	763	746	768	0 0		16771	77.	07447	785		905		000	7000	07661	15500	
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£0 <i>7</i>	2568	964	-119.0-	-22 JAN	- US	978	11R05 9	- 1	1965
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1007	1063	89.8	105.9		SU	967			1964
1030	9201	80.0	10000	13 050	5	365		1	Ţ
100	1070	80 8	1050	- 1	100	050		0830	1964
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	-	-	HELIOCENTRIC	- 1	USSR	945	7	- 1	1964
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978	1061	79.7	104-5	10061	£5	899	EXPLORER 22	1	1964
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1010	1050	88.8	105.0	- 1	\$				
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655	795	63.	90 3	28 446	488H	877		1	154
504	628	<u> </u>	99.0	28 AUG	ASSII	876	COSMOS 44		1964
858	1007	79.9	103.7	25 AUG	5	870	באדרטאבא 20	07.00	
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MAINTAINED	Ę,	ELEMENTS	CURRENT ELEM	1	F 8	858	SYNCOM 3	1	150
	T	010	RADYCEA			2 4 3 5 6 7 6 8 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9			196
AINED			CURRENT	זיין אַטער	5 5	837		64 0408	1364
404	5363		100	- 1	033X				100
399	6645	60.8	163.4	_	USSR	829	ELEKTRON 3		1964 1964
807	826	868	101.2	1	£	816		- 1	100
010	128	99.8	101.4	NOF BT	SO	613			1004

INTER-NATIONAL DESIGNATION

NAME

NUMBER SOURCE LAUNCH

MINUTES NATION

APOCES.

RERICES TRANSMITTING
KM. | FREQ.(MHZ)

NOTES

DBJECTS IN ORBIT

ORIGINAL PAGE IS

OBJECTS IN ORBIT

NUMBER SOURCE   LAUNCII   NINITES   NATION   KM+   FREG.   F	NATIONAL		CATALOG			PERIOD		-			0.000
Color   Colo	DESIGNATION			SOURCE	LAUNCH	MINUTES	NATION	KH.	KM.	FREQ.(MHZ)	NOTES
1001   US   11 FEB   145.4   32.1   2796   2200484   1002   US   11 FEB   145.4   32.1   2809   2200484   1002   US   11 FEB   145.4   32.1   2809   2200484   1003   US   US   US   US   US   US   US   U	ł	1									
Columbia		1001		۱ ـ.	145.4	32.1	2796	2767			
100   100	- 1		1000			165.B	32.1	2809	2783		
Colored Colo			1087	SII	- 1	BARYCE		. 1			
10.04   0.05	1	1	1097	USSR		94.6	65.0	511	485		
1,000   1,00	- 1		1098	assn	-	950	20.30	920	900		
CANALITY GRADIENT 3   1292   US   9 HAR   103.2   70.1   921		THUILDING VII	1271			103.3	70.1	929	902		
Color   Colo	1		1292		9 MAR	103.2	70.1	921	968		
12.06   SECOR (EGRS) 3   12.08   US   9 MAR   103.4   70.1   978	- 1	- 1	1291	SH	9 MAR	103.4	70-1	931	903		
December	(EGRS)	1208			103.3	70-1	928	902 888			
1945   1945	- 1	OSCAR 3	1293		1	103.4	70.1	931	903		
01.06 k         12099         US         9 MAR         103.2         70.1         923           02.02 k         1345         USSR         15 MAR         105.6         56.1         14643           02.02 k         1347         USSR         15 MAR         105.6         56.1         1498           02.02 k         1370         USSR         15 MAR         105.6         56.1         1498           02.02 k         1372         USSR         15 MAR         110.6         55.9         1632           02.02 k         1372         USSR         15 MAR         110.6         55.9         1632           02.02 k         1478         USSR         15 MAR         115.0         56.1         2110           02.02 k         1480         USSR         15 MAR         115.0         56.1         2150           02.02 k         1480         USSR         15 MAR         116.2         56.2         2096           02.02 k         1480         USSR         15 MAR         116.3         56.2         2096           02.02 k         1480         USSR         15 MAR         116.3         56.2         2096           02.02 k         15 MAR         116.3 </td <td></td> <td>SURCAL</td> <td>1245</td> <td></td> <td>- 1</td> <td>103.3</td> <td>70.1</td> <td>927</td> <td>898</td> <td></td> <td></td>		SURCAL	1245		- 1	103.3	70.1	927	898		
CASCAC         1345         USSR         15 MAR         104.6         55.9         749           02.04         1347         USSR         15 MAR         105.6         55.1         1494           02.04         1372         USSR         15 MAR         105.6         55.1         1632           02.04         1372         USSR         15 MAR         106.9         55.9         1632           02.04         1372         USSR         15 MAR         110.6         55.9         1632           02.04         1478         USSR         15 MAR         110.6         55.9         1632           02.04         1478         USSR         15 MAR         110.6         55.9         1632           02.05         1479         USSR         15 MAR         110.6         55.1         2110           02.06         1479         USSR         15 MAR         116.7         56.2         2096           02.06         1634         USSR         15 MAR         116.7         56.2         2186           02.06         1634         USSR         15 MAR         116.7         56.1         1703           02.06         1634         USSR         15 MAR <td>ı</td> <td></td> <td>12099</td> <td>NS</td> <td></td> <td>103.2</td> <td>70.1</td> <td>923</td> <td>896</td> <td></td> <td></td>	ı		12099	NS		103.2	70.1	923	896		
0200         1345         USSR         15 MAR         96.0         55.9         1498           02204         02204         1370         USSR         15 MAR         105.0         56.1         1498           02204         1372         USSR         15 MAR         105.0         56.1         1498           02204         1372         USSR         15 MAR         112.4         55.5         1632           02208         1478         USSR         15 MAR         115.0         56.1         2130           02208         1478         USSR         15 MAR         115.0         56.1         2130           02208         1478         USSR         15 MAR         115.0         56.1         2130           02208         1590         USSR         15 MAR         116.7         56.2         2096           02208         1594         USSR         15 MAR         116.7         56.2         2096           02208         1594         USSR         15 MAR         116.9         56.2         2096           02208         1594         USSR         15 MAR         116.9         56.2         2096           02208         1508         USSR	- 1		1335	USSR-	1	8 707	4		30.5		
02.00.4         1370         USSR         15 MAR         105.6         56.1         1494           02.00.6         1372         USSR         15 MAR         100.9         55.9         1622           02.00.8         1372         USSR         15 MAR         110.6         56.1         1834           02.00.6         1478         USSR         15 MAR         115.0         56.1         2110           02.00.6         1479         USSR         15 MAR         115.1         56.2         2100           02.00.7         1549         USSR         15 MAR         116.7         56.2         2096           02.00.7         1549         USSR         15 MAR         116.7         56.2         2096           02.00.7         1549         USSR         15 MAR         116.7         56.2         2186           02.00.7         1534         USSR         15 MAR         116.7         56.2         2186           02.00.8         234         USSR         15 MAR         116.5         56.2         1769           02.00.8         234         USSR         15 MAR         116.5         56.0         1710           02.00.8         3745         USSR			1345	USSR		96.0	56.1	1498	562		
OCOUNT         1372         USSR         15 MAR         106.1         56.0         1020           OCOUNT         1392         USSR         15 MAR         106.9         55.9         1632           OCOUNT         1478         USSR         15 MAR         110.0         55.1         1189           CLOOBE         1478         USSR         15 MAR         115.0         56.1         2110           CLOOBE         1479         USSR         15 MAR         116.0         56.1         2110           CLOOBE         1495         USSR         15 MAR         116.0         56.1         2110           CLOOBE         1495         USSR         15 MAR         116.0         56.2         2186           CLOOK         1534         USSR         15 MAR         116.7         56.2         2186           CLOOK         1634         USSR         15 MAR         116.9         56.2         2186           CLOOK         1634         USSR         15 MAR         116.7         56.2         2186           CLOOK         234         USSR         15 MAR         116.5         56.4         1170           CLOOK         3745         USSR         15			1370	2551	į .	105.6	56.1	1494	550		
02.04H         1392         USSR         15 HAR         1106.9         55.9         1632           02.08B         1477         USSR         15 HAR         110.8         56.1         1884           02.08C         1479         USSR         15 HAR         115.1         56.1         210           02.08C         1480         USSR         15 HAR         115.0         56.1         210           02.08F         1549         USSR         15 HAR         114.7         56.2         209           02.08V         1597         USSR         15 HAR         114.7         56.2         209           02.00V         1594         USSR         15 HAR         115.9         56.2         2186           02.00V         234         USSR         15 HAR         115.9         56.2         2186           02.0EH         2934         USSR         15 HAR         116.7         56.2         1769           02.0EH         2934         USSR         15 HAR         116.7         56.1         1703           02.0EH         37.43         USSR         15 HAR         116.5         56.1         1703           02.0EF         37.43         USSR <td< td=""><td></td><td></td><td>1372</td><td>92.2U</td><td>ı</td><td>1001</td><td>56.0</td><td>1020</td><td>504</td><td></td><td></td></td<>			1372	92.2U	ı	1001	56.0	1020	504		
CÓDBE         1477         USSR         15 MAR         112.4         55.5         1884           C20BE         1478         USSR         15 MAR         110.8         56.0         2110           C20BE         1478         USSR         15 MAR         115.0         56.1         2150           C20BY         1549         USSR         15 MAR         115.0         56.2         2092           C20BY         1597         USSR         15 MAR         115.9         56.2         2092           C20BY         1597         USSR         15 MAR         115.9         56.2         2096           C20CK         2334         USSR         15 MAR         115.9         56.2         2186           C20EH         2934         USSR         15 MAR         115.9         56.2         1768           C20EH         200EH         2934         USSR         15 MAR         116.5         56.4         1493           C20EH         200EH         200B         15 MAR         116.2         56.7         1843           C20EH         3745         USSR         15 MAR         116.6         56.1         1703           C20EH         3745         USSR <td></td> <td></td> <td>1392</td> <td>USSR</td> <td></td> <td>106.9</td> <td>55.9</td> <td>1632</td> <td>535</td> <td></td> <td></td>			1392	USSR		106.9	55.9	1632	535		
020BC         1478         USSR         15 MAR         110.8         50.1         1884           020BC         020BC         1478         USSR         15 MAR         115.1         56.0         2110           020BC         1480         USSR         15 MAR         115.1         56.2         2096           020BC         1594         USSR         15 MAR         116.7         56.2         2096           020BC         1594         USSR         15 MAR         115.9         56.2         2186           020BC         1634         USSR         15 MAR         115.9         56.2         2186           020EH         2034         USSR         15 MAR         115.9         56.2         1763           020EH         2034         USSR         15 MAR         116.5         56.7         1493           020EH         370B         USSR         15 MAR         116.5         56.4         1493           020EH         370B         USSR         15 MAR         116.6         56.4         1493           020EF         3745         USSR         15 MAR         117.0         56.3         1710           020EV         3945         USSR <td>- 1</td> <td></td> <td>1477</td> <td></td> <td>15 MAR</td> <td>112.4</td> <td>55.5</td> <td>1835</td> <td>655</td> <td></td> <td></td>	- 1		1477		15 MAR	112.4	55.5	1835	655		
C2080         C42080         C42080 </td <td></td> <td></td> <td>1478</td> <td></td> <td></td> <td>110.8</td> <td>1000</td> <td>1684</td> <td>805</td> <td></td> <td></td>			1478			110.8	1000	1684	805		
OZOUBE         1590         USSR         15 MAR         116.7         56.2         2096           OZOUCY         1599         USSR         15 MAR         116.7         56.2         2096           OZOUCY         1594         USSR         15 MAR         115.9         56.2         2096           OZOUCY         1634         USSR         15 MAR         115.9         56.2         2186           OZOUCH         2934         USSR         15 MAR         115.9         56.2         1768           OZOUCH         2934         USSR         15 MAR         115.5         55.6         1493           OZOUCH         2006         USSR         15 MAR         118.2         56.0         1710           OZOUCH         3745         USSR         15 MAR         118.3         56.0         1710           OZOUCH         3745         USSR         15 MAR         116.6         56.1         170           OZOUCH         3945         USSR         15 MAR         117.9         56.0         174           OZOUCH         3945         USSR         15 MAR         117.9         56.0         174           OZOUCH         13517         USSR <td< td=""><td>•</td><td></td><td>2004</td><td></td><td>J</td><td>115.0</td><td>56.1</td><td>2150</td><td>758</td><td></td><td></td></td<>	•		2004		J	115.0	56.1	2150	758		
COZOCY         1549         USSR         15 MAR         114.7         56.2         2096           COZOCY         1597         USSR         15 MAR         115.9         56.0         2186           COZOEH         2034         USSR         15 MAR         115.9         56.2         2186           COZOEH         2934         USSR         15 MAR         115.9         56.2         1768           COZOEH         2934         USSR         15 MAR         115.9         56.3         1768           COZOER         3749         USSR         15 MAR         110.0         56.3         1710           COZOET         3749         USSR         15 MAR         116.6         56.1         1703           COZOET         3931         USSR         15 MAR         116.6         56.1         1703           COZOEY         3931         USSR         15 MAR         116.6         56.1         1700           COZOEY         3931         USSR         15 MAR         110.0         56.3         1701           COZOEY         3945         USSR         15 MAR         110.0         56.0         1701           COZOEY         3965         USSR         <			1405	9220		106.3	55.6	1482	629		
02007         1597         USSR         15 MAR         115.9         56.2         2186           020EH         1634         USSR         15 MAR         111.1         55.2         2186           020EH         2934         USSR         15 MAR         115.9         56.2         1768           020EH         2934         USSR         15 MAR         116.5         55.6         1769           020ER         3769         USSR         15 MAR         118.2         56.4         1493           020ER         3743         USSR         15 MAR         116.5         56.0         1594           020ER         3749         USSR         15 MAR         116.6         56.1         1703           020EV         3941         USSR         15 MAR         116.6         56.1         1703           020EV         3942         USSR         15 MAR         117.9         56.3         1701           020EV         3942         USSR         15 MAR         117.1         56.0         1701           020EV         4025         USSR         15 MAR         110.2         55.6         1702           020EV         1279         USSR         15 MAR <td>1</td> <td></td> <td>1549</td> <td>USSR</td> <td></td> <td>114.7</td> <td>56.2</td> <td>2096</td> <td>784</td> <td></td> <td></td>	1		1549	USSR		114.7	56.2	2096	784		
02.0ED         1634         USSR         15 MAR         115.9         56.2         2100           02.0EH         23.34         USSR         15 MAR         115.5         55.7         1768           02.0EH         29.34         USSR         15 MAR         116.5         55.4         1493           02.0EH         37.08         USSR         15 MAR         116.5         56.7         1613           02.0EF         37.43         USSR         15 MAR         116.3         56.0         1594           02.0EF         37.43         USSR         15 MAR         116.6         56.1         1703           02.0EV         39.43         USSR         15 MAR         116.6         56.1         1703           02.0EV         39.53         USSR         15 MAR         117.1         56.3         1701           02.0EV         39.55         USSR         15 MAR         117.1         56.9         1701           02.0EV         39.55         USSR         15 MAR         110.6         56.9         1742           02.0EV         30.55         USSR         15 MAR         110.4         90.3         1315           02.1A         13.14         US	- 1		1597		-1	98.0	56.0	178	9		
02.0EH         29.34         USSR         15 MAR         115.5         95.6         1768           0.20EH         30.38         USSR         15 MAR         110.0         56.4         149.3           0.20EH         374.3         USSR         15 MAR         115.3         56.0         1594           0.20ET         374.5         USSR         15 MAR         115.3         56.0         1710           0.20EU         393.1         USSR         15 MAR         116.6         56.1         1703           0.20EU         393.1         USSR         15 MAR         116.6         56.1         1703           0.20EU         394.1         USSR         15 MAR         117.1         56.0         1703           0.20EU         396.5         USSR         15 MAR         117.1         56.3         1742           0.20EU         40.25         USSR         15 MAR         117.1         56.0         1742           0.20EU         40.27         USSR         15 MAR         117.1         90.0         1315           0.21A         1314         US         21 MAR         111.4         90.3         1312           0.27B         1349         US			1634			115.9	56.2	2186	790		
020EN         233         USSR         15 MAR         110.0         56.3         1493           020EN         3708         USSR         15 MAR         116.5         56.4         1493           020ES         3745         USSR         15 MAR         116.5         56.7         1813           020EV         3749         USSR         15 MAR         116.6         56.1         1710           020EV         3931         USSR         15 MAR         116.6         56.1         1703           020EV         3965         USSR         15 MAR         117.1         56.0         1701           020EV         3965         USSR         15 MAR         117.1         56.0         1702           020EV         625.2         USSR         15 MAR         117.1         56.0         1742           021A         13517         USSR         15 MAR         110.2         55.6         1742           021A         1273         US         18 MAR         94.4         90.3         1315           021A         1316         US         3 APR         110.7         90.3         1316           0270         1399         US         3 APR         <	- 1		2036		١.	115.5	55.6	1768	1185		
020ER         3708         USSR         15 MAR         106.5         56.4         1493           020ER         3743         USSR         15 MAR         118.2         56.7         1813           020ET         3745         USSR         15 MAR         115.3         56.0         1594           020EU         3745         USSR         15 MAR         116.6         56.1         1710           020EV         3965         USSR         15 MAR         117.9         56.3         1790           020EV         2252         USSR         15 MAR         117.9         56.3         1791           020FF         13517         USSR         15 MAR         117.1         56.0         1742           021A         1273         USSR         15 MAR         110.2         55.6         1742           021A         1273         USSR         18 MAR         110.2         55.6         1742           021A         1273         USSR         18 MAR         111.4         90.3         1315           027A         1316         US         3 APR         111.4         90.3         1296           027C         1399         US         3 APR			2038	3551	ı	110.0	56.3	1863	591		
020ES         3743         USSR         15 MAR         115.3         56.0         1594           020ET         3745         USSR         15 MAR         106.6         56.1         1710           020EU         39431         USSR         15 MAR         116.6         56.1         1703           020EU         3965         USSR         15 MAR         101.8         55.0         1701           020EY         3965         USSR         15 MAR         117.9         56.3         1701           020EY         6252         USSR         15 MAR         117.9         56.0         1701           020FF         13517         USSR         15 MAR         117.1         56.0         1701           021A         13517         USSR         15 MAR         110.2         55.6         1701           021A         1273         US         1 MAR         HELIOCENTRIC ORBIT         539           027A         1316         US         3 APR         111.4         90.3         1296           027C         1349         US         3 APR         110.7         90.3         1287           027C         1399         US         3 APR         110.7 <td>ı</td> <td></td> <td>3708</td> <td>USSR</td> <td></td> <td>106.5</td> <td>56.4</td> <td>1493</td> <td>631</td> <td></td> <td></td>	ı		3708	USSR		106.5	56.4	1493	631		
020ET     3749     USSR     15 MAR     108.6     56.1     1710       020EU     3943     USSR     15 MAR     116.6     56.1     1703       020EU     3963     USSR     15 MAR     101.8     55.9     1711       020EU     3965     USSR     15 MAR     117.9     56.3     1790       020EU     6252     USSR     15 MAR     117.9     56.0     1701       020FF     13517     USSR     15 MAR     110.2     55.6     1742       021A     13517     USSR     15 MAR     110.2     55.6     1742       021A     1273     US     18 MAR     110.2     55.6     1742       023B     1273     US     18 MAR     HELIOCENTRIC GRBIT       027A     1316     US     3 APR     111.4     90.3     1312       027C     1316     US     3 APR     110.7     90.3     1287       027C     1399     US     3 APR     110.7     90.3     1311       027C     1399     US     3 APR     110.7     90.3     1311       027C     1399     US     3 APR     110.7     90.3     1311       027F     1399     US			3743	255	1	7.0	2 4 5	1504	1346		
020EV     3931     USSR     15 MAR     116.6     56.1     1703       020EV     3963     USSR     15 MAR     101.8     56.9     1171       020EV     3965     USSR     15 MAR     117.9     56.3     1790       020EV     6252     USSR     15 MAR     117.1     56.0     1701       020FF     13517     USSR     15 MAR     110.2     55.6     1742       021A     1273     US     21 MAR     HELIOCENTRIC     GRBIT       027B     1219     US     2 MAR     111.4     90.3     1315       027C     1316     US     3 APR     110.7     90.3     1296       027C     1389     US     3 APR     110.7     90.3     1287       027C     1399     US     3 APR     110.7     90.3     1287       027C     1399     US     3 APR     110.7     90.3     1287       027F     11631     US     3 APR     111.4     90.3     1311			3745	1000		108.8	56.1	1710	635		
020EH         3965         USSR         15 MAR         101.8         55.9         1171           020EY         3965         USSR         15 MAR         117.9         56.3         1701           020FY         6252         USSR         15 MAR         117.1         56.0         1701           020FF         13517         USSR         15 MAR         110.2         55.6         1742           021A         1273         US         18 MAR         HELIOCENTRIC ORBIT         539           027A         1316         US         3 APR         111.4         90.3         1315           027C         1316         US         3 APR         110.7         90.3         1296           027D         1389         US         3 APR         110.7         90.3         1287           027D         1399         US         3 APR         110.7         90.3         1287           027D         1399         US         3 APR         110.7         90.3         1311           027D         1399         US         3 APR         110.7         90.3         1311           027D         1399         US         3 APR         111.4         90			3931	USSR	1	116.6	56.1	1703	1354		
020EY     3965 USSR     15 MAR     117.9     56.3     1790       020FP     6252 USSR     15 MAR     117.1     56.0     1701       020FF     13517 USSR     15 MAR     110.2     55.6     1742       021A     1273 US     18 MAR     110.2     55.6     1742       023B     1316 US     21 MAR     HELIOCENTRIC ORBIT       027A     1316 US     3 APR     111.4     90.3     1315       027C     1316 US     3 APR     110.7     90.3     1296       027D     1399 US     3 APR     110.7     90.3     1287       027D     1399 US     3 APR     110.7     90.3     1311       027F     11631 US     3 APR     111.4     90.3     1311			3963	45.2U	15 MAR	8-101	55.9	177	4		
020FD 020FF 020FF 020FF 021A 021A 023B 027B 027B 027B 027C 027C 027C 027C 027C 027C 027C 027C			3965	USSR		117.9	56.3	1790	1383		
021A 1273 US 18 MAR 94.4 99.0 539 021A 1273 US 21 MAR HELIOCENTRIC ORBIT 13.9 US 2 MAR 111.4 90.3 1312 1314 US 3 APR 111.4 90.3 1312 1316 US 3 APR 110.7 90.3 1287 1319 US 3 APR 110.7 90.3 1287 1399 US 3 APR 110.7 90.3 1287 1399 US 3 APR 110.7 90.3 1311	- 1		6252	300	1	110.2	55.6	1742	733	•	
023B 027A 027A 027B 027B 027C 027C 027C 027C 027C 027C 027C 027C			1221		- 1	94.4	0.66	539	643	•	
027A       027A       027A       027B       027C       027C       027C       027C       027C       027C       1389       027C       1399       027C       1399       027E       1399       027E       11631       057F       111.4       90.3       1311			1298	S O		HELIO		. •	076		
027B SECOR (EGRS) 4 1315 US 3 APR 111.4 90.3 1296 0270 1389 US 3 APR 110.7 90.3 1287 0270 1399 US 3 APR 110.7 90.3 1287 027F 1399 US 3 APR 110.4 90.5 1311	- 1		4181	4		 	608	23.5	1366	•	
0270 0270 0270 0275 0276 1399 05 0276 11631 1031 11631 1110 1110 1110 11110 11110 11110 11110		(EGRS)	1315	S		111.4	90.3	1312 1296	1220		
027E 11631 US 3 APR 111.4 90.3 1311 1	1		1389	Sn	ł	110.7	90.3	1287	1231		
11631 US 3 APR 111.4 90.3 1311			1399	SU	3 APR	100.4	90.5	825	125		
	i i		11631	Sn	3 APR	111.4	90.3	1311	1971		

		1881	1186	98.0	108.0	13 AUG	\$	1512		3600	3
		1081	1184	90.0			S	1511		065D	
		1014	1117	90.0	106.5	13 AUG	80	1510		0650	
		1087	1146	89.9	107.6		S	1508		•	
		1074	1176	מואור טאסו	DARTCENTRIC	***	5	150	OD		1
		1140	۱ ۱	n,	2454	- 1	100	1503	CENTAUR 6		
		1137	2417	69.2	122.2	10 AUG	S	1506	SECUR (EGRS) 5	400	1965
		TATNED		,	CURRENT		8	1000	(Foot)		1
		TAINED	NOT MAINTAINED	m	CURRENT		SU	1458		058A	
		400	F		HEL TOCKNIBIC	1	#88 <del>8</del>	1454	20ND 3		
		A04	866	99.0	101.6	2 שטב	S	1529		0510	
		719	800	98.4	100.0	2 JUL	S	1433		916	1965
		728	818	98-5	100-3	- 1	5	1436	TOO IO		
		804	929	89.9	102.3	24 JUN	S	11953			
		500	93,6	800	102	1	£;	11952		<del>0486</del>	- 1
		1000	1093	90.0	106.2	24 JUN	SU	3592		048F	
		993	1106	90.0	106.2		S	1435		0480	1965
		1021	1132	90.0	106.8	24 JUN	S.	1425		0486	- 1
		1021	1105	90.0	106.5	•	S	1428			_
			IT	ENTRIC ORB	HELIOCENTRIC	NOF 8	USSK	1393	NNSS 30040	0404	<b>3</b> 5
		124	- 116	110	94.0		S	1385		1	- 1
		414	496	97.9	93.7		SO	1475		0386	-
		511	767	98.1	97.5	20 MAY	5	1991		0336	
		528	836	88						9880	
		2763	14816	32.1	309.9		S	2529		0340	1965
		2797	2798	32-1	145.4	1	ę,	1361		0346	1965
		2764	14816	30.1	9.90	6 MAY	SO	1360		0348	1965
		989	1327	41.2	108.5	29 APR	05	1107		0360	1365
		547	1048	+	100.8	- 1	45	1995			- 1
		935	1314	41.2	107.8		S	1358		0328	1965
•	136 740	IAINEU	3 NUT MAINTAINED	1 ELEMENTS	1078	1	45	1328	CXPLORER 27		755
		MAININED	- 1		CHREST	6 ADD	511	1318			1965
		1270	13		111.4	3 APR	SO	15340	FARLY BIRD	22.3	1365
		127	1210	90.3		-3 APR	#	14717		0276	
		1268	1316	90.3	111.4	3 APR	S	14716		027P	1965
		1267	1313	90.3	111.9	J APK	5	51291		\$2 <b>₹</b>	<b>1</b> 55
		1272	1310	90-3			5	14649		מבור סבור	1965
		1265	1310	90.3	111.3	3 APR	SU	14048		027K	1965
		1270	1306	90.3	111.5	A PR	5	15151		27	1365
						1	;		o recontent	חסקא	1965
											1965
NOTES	FREQ. (MHZ)	PER ALCORE	KM.	NATION	MINUTES	LAUNCH	SOURCE	• •	NAME	DESIGNATION	DESI
		) ) ) ) 		THE	000100			CATALOC			

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INTER-		SCATALO			DEPION	INCL I	APOGEE	PERIGEE	TRANSMITTING
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	ĸM.	KM.	FREQ.(MHZ)
1965 LAUNCHES	HES (CONT.)								
1		1520	ŠN	13 AUG	107.9	0.06	1184	1077	
		1577	   	1	107.9	90.06	1184	1077	
1965 U65K		1522	S	13 AUG	108.0	90.0	1188	1080	
1.		3810	Sn	_	107.5	0.06	1159	1061	
1965 0650		11855	SS	13 AUG	105.2	90.0	1054	955	
- 1	COSMOS 80	1570	ASSIL	3 SEP	115.0	56.1	1543	1363	
		1571	USSR	3 SEP	115.3	56.1	1546	1993	
1965 0700	COSMOS 83	1573	USSR	3 SEP	116.0	56.1	1560	144	
- 1	- 1	1574	USSR	- 1	116.4	56-1	1571	7961	
		1575	USSR	3 SEP	114.6	56.1	1513	1359	
- 1		404	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	10 650	101	98.9	1012	049	
		1583	2 2		100.8	98.8	996	630	
1965 072E		1931	Sn		102.4	7.86	1107	634	
- 1		1932	SII		990	98.5	828		
		1584	USSR		115.0	56.1	1629	1284	
		1585	255	925	115.8	26.1	1648	1337	
1965 0730	COSMOS 88	1587	USSK	10 SEP 18 SEP	116.2	56.1	1661	1361	
1965 0736	١	1588	USSR	_	116.7	56.1	1675	1385	
- 1		1589	USSR	Т	116.8	56.0	5991	32.0	
		1590	USSR	18 SEP	116.1	56.1	1648	1370	
1		76.	933	ļ	117.2	56.2	1731	1375	
1965 0732		1618	USSR	18 SEP	117.4	56.2	1752	1379	
1965 0731		2647	USSR		116.0	56.1	1647	1355	
t		1613	SIL	1	120.5	3:	2999	1	
		1616	Sn	5 OCT	119.6	87.3	525	318	
1965 0818	- 082m		Su	15 OCT	EE	NOTE	5*	•	
	EXPLURER 29	1726	SII	A NOV	120.3	59.6	2268	8111	
		1729	S	ADN 9	120.3	59.4	2226	1060	
1965 0890		2888	Sn	1	121.3	59.5	2325	1152	
1965 0014	VENEDA 2	1730	assn	ı	NELTO	- 1	ORBII		
1 .		1736	USSR	16 NOV	HELID	HELIOCENTRIC OF	ORBIT 876	189	
	EXPLURER 30	1730	2 2	1	100.2	59.7	838	169	
1965 0938		2013	SI	. 0	0 66	59.7	113	652	
1965 0930		2088	S O		100.6	59.7	875	696	
- 1	A=1	1778	ERANCE	•	0 80	45	4331	524	
		1805	FRANCE	26 NOV	104.3	34.3	14.09	516	
	ALCHERTE 3	1804	CANADA	i	119.4	19.9	2799	505	
1965 098A	- 1	9091	Sil	ام.	120.5	79.8	2908	502	
1		1807	ns		119.8	79.8	2837	204	
- 1		1808	4	29 MOV	17.7	7	86 7		

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DBJECTS IN DRBIT

88		***	1004			100	12866		
888	1102	89.	105.0		2 6		2120	MN 3 30080	1966 6248
1331	1514	101-4	1143	- 1	28	<u> </u>	9714	<u>י</u>	
1347	1562	101.0	115.0	FE8	28	S	2224		
1238	1382	1813	1114		128	=			- 1
1351	1413	100.9	113.4	3 FE8	28	S	2096		
1367		101-1	113.4			45	1605	E 55A 2	1966 016A
455	1137	3	100.8			FRANC	14845		1966 013P
***	929	2 0	99	1		FRANCE	14844		- 1
511	2171	34 1	112.5		E 17	FRANC	2161		_
404	1503	24.6	105 7	ı		FRANCE	2022		
504	2515	1916	116.2			FRANCE	2017	1	
000	3677	34 1	1140	ı		FRANC	301	D-14	1
, 0	790	97.8	99.6	-		Sn	2154		
000	000	99.0	100 3	1		100	2118		
	670	07.0	07.0	א בפס		= 5	2085		
680	610	91.0	27.7				1002		
		CT D	•			21)	1982	ESSA 1	
828	1159	89.8	•		28	05	1 4667		1966 005E
798	1122	44.4		ŀ		, 9	1 7 5 3 1		
846	1185	89.8	105.5		20		16611		1966 0058
	1034	89,8		- 1		; ;	11001		
1070	1331		109.4		28		2889		1966 005E
825	1045	89.8	103.7	BAAN	1		1412		- 1
853	1358	90.0	107.4		28		2140		
952	1200	4	•	1	28		1953		1966 0058
853	1193	89.8	105.6	B JAN	2	Sn	1952	NNSS 30070	
								IES	1966 LAUNCHES
530	572	55.9	95.7				1937		1965 1120
475	500		94	9 950	29		1868	COSMOS 103	1965 1124
881	1115	89.4	•		~		2353		1965 109E
803	1275	80	106-0	2			2226		1965 1090
906	879	89.1	102.0	i	2		2086		
999	1000		104 0	2 050	:		1965		ł
900	1065	80 1	104.7				1864	NNSS 30060	
510	n 0	6 C	20.4	17 DEC			1844	١,	
	Ŧ	AND DESCRIPTIONS	0,000	17 DEC		95511	1841	COSMOS 100	
714			74.6	-	<u>.</u>		1961	PIONEED 6	1
117	728		200	- 1		1	1915	, , , , , , , , , , , , , , , , , , ,	
504	2796	•	119.3			n	1917		
505	2810	18.8		- 1			2162		
493	2528	79.7			2 V		2002		ı
502	2525			- 1	,		1051		
488	2106		•	A DN 67	۰,		1945		,
	2				.,		1944		1700 UYBE

INTER-NATIONAL DESIGNATION

NAME

NUMBER SOURCE

LAUNCH

MINUTES

NATION

APOCEE

PERICES TRANSMITTING
KM. FREQ.(NHZ)

NOTES

OBJECTS IN ORBIT

ORIGINAL PAGE 13
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NATIONAL	MAN	NIMBER	SOURCE	1 AUNCH	MINUTES	NATION	KM.	KM.	FREQ. (MHZ)
DESIGNALION		NOTIBLE	JOOKE	Luciaci					
966 LAUNCHES	IES (CONT.)								
1	0V1-5	2122	Sn.	30 MAR	105.6	144.6	1058	987 988	
		477	 	1	0.401	144.5	1009	888	
1966 0250		3611	S 2	30 MAR	103.8	144.6	1001	878	
1966 0256		5361	ns			144.6	866	930	
		5599	SII	- 1	103.8	144.6	966	881	
_		2125	Sn	31 MAR	99.8	98.6	885	611 588	
1		7716	ļ E	l.	101.0	98.9	1004	809	
1966 0200		2179	SII	- 1	97.9		146	573	
1 .	LUNA 10	2126	USSR		SELENDO	SELENDCENTRIC ORBIT	111		
1966 0270 1966 027E		2131	USSR	<b>L</b> _	BARYCENTRIC	TRIC ORBIT			
- 1		2132	ASSI	- 1	BARYCENTRIC	TRIC OFFI	١	965	
	0A0 1	2142	Sn	8 APR	100.8	95.0	800	775	
1	1000	2150	3 =	1.	139.0	82.4	4674	344	
_	UV 3-1	2167	21	٠,	126.4	82.4	35.94	338	
1966 034D		2209	NS		108.6	82.3	2019	303	
- 1	COSMOS 118	2168	8551	X 1 :	93.2	0 4	488		
	6 210424	2169	2 × ×	15 MAY	108.0	100.3	1176	1001	
1966 040B		2174	US		107.8	100.4	1167	1082	
- 1	0600E SSNN	2176	Su		103.0	89.9	958	844	
		2180	S n	19 MAY	103.1	89.0	965 786	726	
1		4777	1	1	105.2	89.9	1169	836	
1966 0410		3591	SII		103.0	89.9	959	844	
1.		4555	Sn	_	102.4	89.9	929	820	
- 1		2187	SI	٦	BARYCE	₩.	2	MATMITATMEN	
_	£ 000	2195	SD SI	JUN 1	CURKENI 143.0	AO.8		1 A 1 NE D	
1966 052B		2206	SN	' '	142.7	40.8	4693	449	
- 1		2498	SII	-1	n	9000	12.60	135	
_		2516	S	10 VI	144.8	41.0	ABII NOT MAIN	11 /02 MAINTAINED	
1966 053A		2215	Si	[ ]	CURRENT	l		MAINTAINED	
1966 0536		2216	SH		CURRENI	.1	d d	MAINTAINED	
		2217	O.S	16 JUN	CURRENT		NOT	MAINTAINED	
1966 053E		2218	Sh	1	CURRENT	T CLEMENTS		MAINTAINED	
		2219	2 5	200	CURRENT			MAINTAINED	
1966 0536 1966 053H		2221	Sn		CURRENT		NOT	MAINTAINED	
- 1		2222	SH	-10-411	1351.7	 	19592	2355	
	PAGEOS 1	2253	S O	24 JUN	178.2	85.2 86.0	4874	3350 6173	
- 1		4477	3 2	NIN 4C	181.3	86.9	4273	4193	
		2511	811	- 4		87.0	4255	4223	
1960 0960		8064	n S	24 JUN	177.1	85.8	6753	1383	
			•						

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MATIGNAL		•			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	•	1			
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	KM.	PERICES.	FREQ. (MHZ)	NOTES
1966 LAUNCHES	S (CONT.)									
		8074	SU	24 JUN	177.9	85.3	6199	2001		
- 1		9460	S	NOF 42	177.9	85.0	2919	2039		
1966 056AH		9468	S S	24 JUN	176.4	85.2	6891	1187		
1366 05666		13795	25	i	164°	8512	4874	2252		
057A	COSMOS 122	2254	USSR	25 JUN	94.3			457		
0580	TAL EGNER 33	2260	Su	1 JUL	CURRENT	IT ELEMENTS	S NOT	MAINTAINED		
- 1		2327	£,	- 1	104.5	144.2		960		
1966 0630		9252	l s	ויף שור	105.3	144.2	1014	999		
063E		2337	SS	וא שער	105.2	144.2	1010	1001		
0708		2404	SS	\$ AUG	112.0	81.4	2302	338		
1966 073B		2395	S S	10 AUG	BARYCENTRIC	NIRIC ORBIT	11	415		0
1966 075A P	PIUNCER 7	2398	5 5	17 AUG	100 July 100	HELIOCENTRIC ORB	ORBIT			ון אול
40*	NN55-30100	1	45	ł	1000	Γ '	1091	1043		Od IIE
		2413	S			88.9	1093	1046		AV 400
		2702	S	- 1	108.1	88.6	1205	1070		
0778	SECOR (EGRS) 7	2411	S		167.5	89.8	3697	3673		iba Jau
1966 078A L	LUNA 1:	2406	USSR		` <b>`</b> ` ¶	'ក [	ORBIT			81 : YTI.
		2422	SO	- 1	100.3		868	679		\$
1966 087A E	SSA 3	2435	SS	1	, u	101.0	1	1383		
		2518	S	2 001	115.9	100.8	1558	1429		
		6213	S		113.7			1340		
-		2481	S	- 1	167.5		4	3662		
094	LUNA 12	2508	USSR	22 DCT	SELENO	SELENOCENTRIC O	ORBIT	-		
0964	INTELSAT 2 F-1	2514	IISO	ı	718.9	8.9 18.3 3	37126	3284		
TIOA	ATS 1	2608	S	i	1434.6	11.9	35784	35731	136.460,137.350	:
1118	DV1-10	2611	Sn	11 DEC	97.5	93.4	689	592		
1966 1110		<del>2621</del> 2622	S S	11 DEC	140.3	934	728	617		

OBJECTS IN ORBIT

OBJECTS IN ORBIT

INTER-		CATALOG			DER 100	INCL I-	APOCEE	PERICEE	TRANSMITTING	
DESIGNATION	3N NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	KM.	KH.	FREG.(MHZ)	NOTES
	INTELSAT 2 F-2	2639	1150	11 JAN	CURRENT	T ELEMENTS	NOT MAINTAINED	AINED 318		
1967 0015		5987	Sn :	11 CAN	521.5	١		449		
1967 0011		5990	Sn	11 JAN	CURRENT	1.	NOT	AINED		
- 1		5998	SH	11 JAN	655.9	28-1	36680	625		
	•	16756	SIIS		\$10.3	26.8		258		
1967 003A		2645	ns	,	CURRENT	T ELEMENTS	NOT MAINTAINED	AINED		
1967 0038		2649	Su	18 JAN	CURRENT	1.	Š	AINED		
ļ		2651	Su	I	CURRENT	. 1.	I ON	AINED		
		2652	S	18 JAN	CURRENT	T ELEMENTS T ELEMENTS	NON	MAINIAINEU		
1967 0036		2654	Sn	ר ו	CURRENT		NOT	MAINTAINED		
- 1		2655	SH	- [	CURRENT	1		ATACO		
		2660	S	18 JAN 26 JAN	CURRENI	101.9	1438 13	1323		
1967 0068		2661	Sn		113.6	102.0	1439	1339		
- i		2706	Sn	1	2.611	707.	1460	1228		
		2707	S o	26 JAN	112.0	101.9	1656	1280		
1967 0065		2669	Sn	ı	101.2	98.9	855	777		
- 1		2741	SII	- 1	101.2	98.9	828	200		
	DIADEME 1	2674	FRANCE	30 a	102.5	0.00	1267	563		
1967 0118		2689	FRANCE	l	99.2	40.0	933	505		
		2692	ERANCE	B EEB	868	0.04	128	dx d		
ŀ	DIADEME 2	2680	FRANCE	15 FEB	109.2	39.4	1793	587		
1967 0148		2684	FRANCE		108.2	39.9	1710	573		
		2685	FRANCE		107.4	39.0	1637	573		
ł		14505	FRANCE	15 FEB	110.3	38.9	1923	554		
1967 C14K		15531	FRANCE	15 FEB	103.2	39.5	1267	554		
- 1		2696	USSR	8	93.8	1.	ONT MATMITTAL	ATMEN		
	INTELSA	2717	1150	23 MAR	CUKKENI 95.2	11 ELEMENIS 56.0	- 1	508		
1967 0278	LUSRUS 151	2721	USSR		93.0	56.1	426	419		
- 1	NNSS 30120	2754	yn :	ADA AL	404	20.5	1076	1043		
		7776	SI	- 1	103.6	90.2	1039	820		
1967 0340		2778	ns	14 APR	108.4	90.3	1248	1053		
i		4843	Sn.	14 APR	1000	ADVIENTOTE DERIT	Τ.			
_		2764	S	20 ADP	113.5	•	1420	1352		
1967 0364 1967 0368		2753	S	l	113.5	101.8	1417	1354		
- 1		2976	SH S	20 APR	114.6	101	1482	1388		
	) COSMIS 156	2911	ASSI USSB	5 H	94.2	81.2	486	698		
4460 1047			i i	I						

	TAINED	NOT MAINTAINED		CURRENT	28 SEP	S	2971		1967 0940
		JOT MAINTAINED	SERVING A	CURRENT	18 SEP	1150	2969	1N1CC 5A1 2 FAG	1701 0744
	919	990	89.3	104.2		200	26621		7760
	906	766	89.		- 1		10555		
	2601	1323	1.68	• •	-	i 6	12667		1
			3	,		100	2127		•
	2004		000	106.0		115	2006		۲
	1023	1105	80.2	106-6		SS	2967		0928
	1030	1105	2	1	1	<b>.</b>	2965	WSS 30140	4560
	959	0		RYCE		CS.	2938		~
	820	876	900	101	1	5	2940		1967 0808
	822	879	·	101.9	23 AUG	SO	2920		1967 080A
			þ	BARYCENTRIC	1 25	\$	2908		1967 0758
		11	NTRIC ORB	SELENOCENTRIC	שיים פון פון	S	2884	EXPLORER 35	1967 070A E
				BARYCENTRIC		25	2883		1967 0688
	33274	33654			זור ד	S	2868		1967 066G
	TATRED	1	1	CURRENT	1	9	2867	9096E	1967 0667
KJ SI	MAINTAINEO		_	CURRENT	TUL 1	S	2866		066E
	******	ADT ALL	L	- CURRENT	-	\$	2865		- 1
7 <b>7</b> 3E	MAINTAINED			CURRENT	1 JUL	S	2864		
	ストースイトーのD		THE STREET	CURRENT	1 444	90	2863		i
A Q	MAINTAINED	NOT MAIN	ELEMENTS	CURRENT	ז שער	S	2862	TITAN 3 C-14	066A
	197	3942	89-9	1221	THE GET	8	2877		26.00
	3794	3945	89.9	172.1	29 JUN	S	2876	AURORA 1	0658
	EST C	3945	\$	1724	- 1	\$	-200	-	003X
112 D4		1	_	_		S	2846		0608
		*	HRIC DRBI	HEC IOCENTRIC	TA JUN	S	2845	HARINER 5	060*
<b>JC</b>	856	868	70.0	102.2	31 MAY	SO	2909		0534
	905	920	70.0	103-3	JAN AX	US	2874		1967 053H
	903	918	70.0	103.2	31 MAY	SN	2873		•
	803		5			Ę	2872		1967 0536
	898	913	70.0	103.1	31 MAY	S	2847		•
	905	920	70.0	103-1	1	88	2834	1	0530
	903	919	70.0	103.2	31 HAY	SO	2828		0530
	904	918	70.0	103.2	1	25	2825		1967 0538
	859	882	70.0	102.4		S	2826		1967 053A
	1063	1004	8	-	ł	£	281		
	1061	1093	89.7	106.8		S	2807	NNSS 30130	048A
	604	480		87.3	1	4558	3737		1967 0450
	657	718	74.0	98.5	_	USSR	2823		1967 045C
	716	825	7	100.3	ł	USSR	2802		1967 0458
	731	814	74.0	100.3	15 MAY	USSR	2801	COSMOS 158	1967 045A
	508	658		96.4		45	2780		1967 0438
	MAINTAINED	NOT MAIN	ELEMENTS	CURRENT		S	2770		7 040F
	TATMED			CHOCKE	ı	- F	2769	4	1967 0406
	MAINTAINED			CURRENT		SU	2768	_	7 0400
	MAINTAINED	NOT MAIN	ł	CURRENT	1	SP .	2767	ERS 18	9400
	TATMED			CURRENT		US	2766		1967 0408
	MAINTAINED		MENTS	Ε;	1	us.	*		1967 0404
	491	560	81.2	95.1	27 APR	USSR	2763		1967 039B
								S (CONT.)	1967 LAUNCHES
FREQ. (MHZ) NOTES		XX.	NATION	8	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION
TRANSMITTING	0501655	DOCEE	TAICT T	DER LOO			CATALOG		MATTONAL

MATIONAL		CATALOG			PERIOD	INCL I-	APOGEE	PERIGEE	TRANSMITTING	
DE SIGNATION	NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	жж.	KM.	FREQ.(MHZ)	NOTES
1967 LAUNCHE	ES (CONT.)									
		2985	us.	11 OCT	99.4	99.1	815	648		
77	CUSMUS LEG	3011	USSR	24 OCT	95.4	81.2	603	468		
1	ATS 3	3029	Sn :	1	1436.1	11.1	E	35729		
1	ESSA 6	3036	SS	10 NOV	114.8	64.8 102.0	1482	1407		
1		3051	Sn		114.1	101.1	1482	1344		
1967 114D 1967 114E		5443	Sign	1	114.6	101.3	1484	1386		
†		3048	USSR	23 NOV	<b>4.</b> 66	9.4 74.0	735	724		
1967 123A 1967 127A	COSMOS 198	3081	USSR		103.4		928	908		
1968 LAUNCHES	ES									
	70 0000	3092	Sn	AAL 7	BARYC	BARYCENTRIC ORBIT	1573	1079		i
1968 032B		3094	Sn	1	112.1	105.8	1565	1079		
1968 002C 1968 002D		3126	Sa	1	112.1	105.3	1570	1075		
1968 011A 1968 011B	COSMOS 203	3131	USSR	20 FEB	109.2	0.5	1205	1178		
1	NNSS 20180	3137	Sn	Z HAR	106.8	0.06	1133	1022		
1968 012C 1968 012D		3214	Sn	1	108.7	ì		1021		
1968 013A 1968 014A	20ND A 060 5	3134	usse Us		CURRENT	ELEME	2	MAINTAINED		
1	EXPLORER 37	3145	Si	S HAR	95.6	59.4	69	9 450		
	CUSMOS 206	3150	<b>^</b> • • • • •	•	93.6	81.2	455	445		
1	COSMUS 209	3158	USSR	22 MAR	103.1	65.3	928	878 *88		
1968 026A 1968 0268	0V1-14	3174	Sn	1	207.3	100.0	9874	576		
1		3212	Sn	6 APR	198.6	8.6 100.0	9216	582		
1	COSMOS 220	3229	USSR	1	98.5	l	724 718	653 647		
1		3231		7 MAY	96.6		617 888	570 810		
		3271	Sn	23 MAY		99.0	886	808		
1968 0498 -		1966	1	ı	INGGOOD	١.	LA NOT MAIN	MAINTAINED		

		1448	101.4	0	15 DFC	S	3616		1148	1968 ]
		+ + + + + + + + + + + + + + + + + + + +	101.4		1	-88	3615	ESSA 8	441	
	1402	1455	80.6	•	12 DEC	SU	3840		112E	
	1374	507	5	7		US :	3618		0211	1
	1374	1 4 4 5	80.2	114.0	12 DFC	S	3617		1120	
		1 1 7 3	• •		יייייייייייייייייייייייייייייייייייייי	116	3676		1100	i
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	1164	1215	7.0		J NOV		3517	040-43	1000	1000
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		•	TRIC ORBIT	IOCEN		SOS	3533	- 7		
			-	SEE NOTE	- 1	USSR-		- 1	ı	- 1
	562	2091	62.3	~	NOV 1	USSR	3530	COSMOS 252		
	788	833	98.4		1	-88	3522			ı
	791	836	98.3			S	3510		092A	
	(3)	.00	34	N ADT		USSA				
	828	2005	62.4	7	_	ISSR S	3504	COSMOS 249		
	36199	36320 36388	9.2	1 400 4	70 SEA	5	3632		Ì	1
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	MAINTAINED				-	SO	3428	0VZ-5	W180	1968
	183	505	56+1	9445	57 806	055K	7466	CUSMUS 236		- 1
	1435	1481	101.7			S	1499			
	 		9			5	3975		\$97	•
	1422	1477	101.8			S	3974		069E	
	1300	5841	101.0	113.0	10 AUG	5 5	0146		0090	1968
	1426	3	1010		- 1	,	3616		0696	1
	1429		101.6			S	3345	ESSA 7		
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:	680	2165	80.7		8 AUG	S	3392		066H	
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	619	2020	00.0	C • 21 I	0 206	5	2466		9666	1
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	5826	5860	120.0	1	4 485	us :	8486		0 <del>55</del> 6	1968
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	7818181860	? †	ecements	1263 7	13 1110	100	1797		0501	
	MALNIAINEU	• -	CLEMENTS	CUXXEN	13 444	46	3290		700	1
	MALNIAINEU	1	PERMENTS.	CURRENT		9	2200		0506	
	MAINTAINED	· <del></del>	ELEMENTS	CURRENT		S	3288		0506	8961
	HAINTAINED	Ť	PERSONAL PROPERTY.	CURRENT	ı	\$			9505	
	MAINTAINED	_	ELEMENTS	CURRENT		SU	3286		050C	1968
								S (CONT.)	LAUNCHES	1968
FREQ. (NHZ)	XI.	¥.	NATION	MINUTES	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION	ESTG
TRANSMITTING	PERICEE	1000 mm	121	PERIOD			CATAL BG		**	NATEUNAL
										コンドスコ

NATIONAL		CATALOG			PERIOD	INCLI	APOGEE	PERIGEE	TRANSMITTING	
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	χ.	KM.	FREQ.(MHZ)	NOTES
1968 LAUNCHES	ES (CONT.)								ļ	
1968 1140		3812	Sn	ŀ	116.3	102.3	1571	1458	l	
1968 116A	INTELSAT 3 E-2	3623	Sn	21 DEC	HEL IOC	CUKKENI ELEMENIS MUL HAINIAINEN HELIOCENTRIC ORBIT	311	THE REAL PROPERTY.	ı	
- 1	ES			1					1	
- 1		0,,,,	404140	MAL	127 0	4 88	3490	574	1	
1969 009A	1818 1	3669	CANADA	30 JAN	127.3	88.4	34.32	573	i	
		3673	S O		114.0	4.08	1430	1392		
1969 013C	INTELSAT 3 F-3	3674	1150	6 FEB	CURRENT	ELEMENT	S NOT MAIN	MAINTAINED	ł	
- 1		5977	3	- 1	CURRENI	- 1		MAINTAINED	1	
		3691	SO	9 FEB	CURRENT	IT ELEMENTS IT ELEMENTS	NON	MAINTAINEU Maintaineo	ı	
1	MARINER 6	3759	Sn	1	HEL I OC	NTRIC	11			
1969 0168 1969 016A	ESSA 9	3764	Sn	1	115.2	I		1423	ı	
- 1		3767	SII	- 1	115.1	1	1497	1419	1	
	CPC 307300	3770	OS	3 MAR	HELIO(	HELIUCENTRIC ORBI	1206	1176		
1969 024B		3819			109.1	74.0	1193	1179		
1969 024C	0V1-19	3825	USSR	18 HAR	152.2	104.7	5652	474	1	
- 1		3827	SII	18 MAR	151.3	104.8	5574	683		
	METEOR	3835	USSR	26 MAR	96.9	81.2	629 551	592 395		
1969 029E		3851	USSR	I	92.0	81.2	401	347		
- 1	1	3879	45.5R	26 MAR.	92.3 HEI 10	WEI TOCENTRIC OR	URBIT		ı	
1969 030A	MARINER 7	3837	s SII	- 1	HEL ID	- 1				
1969 036A		3889	Sn:		CURRENT	NT ELEMENTS	S NOT MAINTAINED	ITAINED		
1969 037A 1969 037B	SECOR (EGRS) 13	3891	Sn		107.2	99.8	1128	1067		
1969 0370		3892	S	18 MAY	HELIO	HELIDCENTRIC ORBI	817			
1	LMZDESCENT	3948	SI	- 1	SELEN	SELENDCENTRIC DRBIT	RBIT		•	
	LM/ASCENT	3949	1150	18 MAY	HEL IOCE	NTRIC FIENS	IT	MAINTAINED		
1969 0654	0V5-5/ERS-29	3950	Sn	1	CURRENT		NOT	MAINTAINED		
- 1	0.05=6	3951	SH		CURRENT	ļ		HAINTAINED		
	0.62-9	3952	Sn	23 MAY	CURRENT	NI ELEMENIS NI FIFMFNIS		MAINIAINEU		
1969 046E		3955	o n	ł	CURRENT	ŀ	NOT	MAINTAINED		
1969 065E		3993	Sn	7	CURRENT		1	MAINTAINED		
4	- 1	0000	S	۵.	HELLIN	7	CORIT			*6
	LUNAR MODULE	4041	S Z	16 JUL 23 JUL	) SELEN	SELENUCENIKIC U	841	174		
1969 062B		4048	Sn	1	101.0	98.8	837	273		
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1082	1085	99.5	100.9	* * * * * * * * * * * * * * * * * * *	de a	5	1000	- 025NZ	
1084	1098				•	<u>,</u>	205	INPO 1	
335	33074	25.9	581.7	M A R	20	S	5975	NT MOLLE 6	7120 0261
183	32631	26,1	576-1	**	130	65	4354		- 1
35625	35992	8.6	1437.3	MAR	20	NATO	4353	NATO 1	
760	854	98-9	101.0	TE 8	+	45	4332		
757	851	98.9	101.0	FE8	11	S	4331		
224	3636			+		44044	1338	BHSUNI	1970 0117
9611	1045	6.66	106.0	FEB	اً ح	S	4327	SERT 2	
140	1477	101	115.0	1		45	4322		1970 008C
1621	1476	101.6	115.0			AUSTRL	4321	DSCAR 5	1970 008B
1 4 2	16.77	<b>+</b> :	115.0	1		Sa	4320	1105-1	1970 008A
29.3	7		558.0		5	S	4298		1970 0038
TATMED	NOT MAINTAINED	T ELENENTS	CHRENT		‡	##	+297		1970 003A
								#E5	1970 LAUNCHES
9611	1158	74.0	108.3	1	7	4660	6674		0001 (001
1139	1174	74.0	108.5		12	USSR	4254	CUSMUS 312	
TATMED	Ī		CURRENT.	- 1		•			
	-	AAV 10N S1	ELEMENTS		22	Ş	0.576	UNINC A	1040 1010
TATARP	Ţ	CURRENT ELEMENTS	CURREN		1	8	9226	٠	- 1
372	2115	102.9	110.4	VOV	8	SO	4222		_
279	2558	102 8	115.3	1		FRC	4221	GRS-A/AZUR	
719	726	74.0	99.3		21	USSR	4139		
2	753	24.0	8	1	1	4884	1		1969 691
509	659	81.2	96.4		σ,	USSR	4120		_
<b>N</b>	616	NUTE 10	DEE NO		,	855	4119	MCTEOR	1
		4	1			- 0		- OBOKI	082L
850	8/6	70.0	102.2	SED	30	F 5	4112		
898	2					<u>.</u>	4166		
898	933	70.0	103.3		, <u>u</u>	5 5	C474		1060 0000
898	933	70.0	103-3	- 1		, ¢	200		
898	933	70.0	103.3		30	S	4237		
898	934	70.0	103-3	- 1	30	 	4259		- 1
898	932	70.0	103.3		30	Sn	4257		
895	928	70.0	183		1	=	1256		
733	766	74.1	99.8		13	USSR	4084		
715	737	*	99.3	1	1	HSSR	1704		- 1
08.6	745	74.1	99.6	_	13	USSR	4070	CDSMOS 292	
2086	36407	17.2	682.2	1	1:	£ :	1665		1969 0696
20282	37201	170	703.3	A S	17	15	4069		1969 0698
268	4113	30° 3		_	20		4040	+15 5	1969 0694
						-			

INTER-NATIONAL DESIGNATION

NAME

NUMBER SOURCE LAUNCH

MINUTES

NATION

APOCES.

PERICES TRANSMITTING
KM. FREQ.(MHZ)

NOTES

DBJECTS IN GRBIT

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DESIGNATION NAME  1970 LAUNCHES (CUNT.)  1970 0226 1970 0328 1970 0348 1970 0348 1970 0348 1970 0348 1970 0348 1970 0366 COSMUS 334 1970 0366 COSMUS 334 1970 0366 COSMUS 334 1970 0366 COSMUS 349 1970 0366 COSMUS 349 1970 0366 COSMUS 349 1970 0366 COSMUS 349 1970 0366 COSMUS 343 1970 0366 COSMUS 343 1970 0367 COSMUS 363 1970 047A METEOR 1970 047A METEOR 1970 047A METEOR 1970 047A COSMUS 368 1970 046A	F=7 14814 4337 4332 4332 4332 4333 4333 4336 4336 4336	4814 USSR 4382 PRC 4382 PRC 4382 PRC 4382 USSR 4383 USSR 4384 USSR 4386 USSR 4389 USSR 4389 USSR 4390 USSR 4391 USSR 4391 USSR 4391 USSR 4391 USSR 4393 USSR 4418 USSR 4419 USSR 4419 USSR 4419 USSR 44419 USSR 4443 USSR 44440 USSR 4440 USSR 4440 USSR 4440 USSR 4440 USSR 4440 USSR 4440 USSR 4440 US	11 APR 23 APR 24 APR 25 APR 26 APR 27 APR 27 APR 28 APR 29 APR 20	S SENT SENT	74.0 68.4 68.4 68.4 68.4 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74	74.0 755 77 ELEMENTS NOT HAINTAINED 68.4 2258 4 74.0 156.4 14.0 74.0 1550 14.0 74.0 1550 14.0 74.0 1467 14.0 74.0 1467 14.0 74.0 1467 13.0 74	KN. FREQ.(MHZ) 737 737 737 737 1MED 422 1466 1466 1466 1466 1340 1373 1465 1373 1465 1373 1465 1373 1465 1373 1465 1373 1465 1373 1465 1373 1465 1373 1465 1373 1465 1373 1465 1373 1465 1373 1465 1373 1465 110ED 110ED 110ED	HZ )	NOTES
LAUNCHES (CUNT.)  U28C  032A  034A  034B  034B  034B  034B  034B  034B  035B  036B  036C  COSMOS 336  036C  COSMOS 339  036C  COSMOS 340  036B  046B  047A  METEOR  047B  047B  067B  068B		+9-000000000000000000000000000000000000		99.7 CURRENT 112.6 115.6 115.6 115.0 115.0 115.0 113.9 113.9 113.9 113.9 113.9 113.0 114.5 114.5 115.0 114.5 115.0 110.9 110.9 101.9 404.8 CURRENT CURRENT CURRENT CURRENT	74.0 ELEMENTS EELEMENTS 68.4 74.0 74.0 74.0 74.0 74.0 74.0 74.0 74	755 NDT MAINTA NDT MAINTA 1747 1484 1550 1516 1467 1467 1467 1467 1467 1467 1467 14	737 INED 1NED 422 422 1461 1466 1466 1466 1466 1308 1373 1443 1466 1308 1373 1465 1308 1373 1465 1308 1373 1465 1465 548 548 548 548 548 548 11NED 11NED 11NED 11NED		
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036B COSNUS 337 036C COSNUS 339 036C COSNUS 340 036C COSNUS 341 036C COSNUS 343 036A CUSNUS 343 037A METEOR 047A METEOR 047A METEOR 047A METEOR 047A COSNUS 358 067A COSNUS 358 067A COSNUS 358 067A COSNUS 358 067A COSNUS 358 067A COSNUS 358				116.2 115.8 1114.6 1113.9 1113.9 1114.2 116.6 97.1 97.1 101.9 101.9 101.9 101.9 100.8 100.8	74.0 74.0 74.0 74.0 74.0 74.0 74.0 24.0 81.2 81.2 81.2 81.2 81.2 81.2 81.2 81.2	1550 1467 1467 1467 1467 1467 1586 648 648 720 NOT HAINTA 879 879 879 879 879 879 879 879	1466 1443 1443 1443 1443 1340 1308 1373 1373 1465 548 548 548 11NED 11NED 11NED 12015 11NED		
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036E COSMOS 340 036F COSMOS 341 036H COSMOS 343 036H COSMOS 343 037A METEOR 047A METEOR 047A METEOR 047A METEOR 057A INTELSAT 3 057A COSMOS 358 067A COSMOS 358 067A COSMOS 358 067A COSMOS 358				11111°	74.0 74.0 74.0 74.0 74.0 74.0 81.2 81.2 81.2 81.2 81.2 81.2 81.2 81.2	1467 1467 1467 15467 1586 648 720 NOT HAINTA NOT HAINTA 97728 37728	1406 1340 1340 1308 1373 1465 548 548 548 1NED 11NED 13615 11NED		
036F CUSMUS 341 036H CUSMUS 343 036H CUSMUS 343 0378 0478 0478 0478 0678 0678 0678 0678 0678 0678 0678 06				=====	74.0 74.0 74.0 74.0 74.0 81.2 81.2 81.2 81.2 81.2 81.2 81.2 81.2	1467 1467 15467 1586 648 720 NOT HAINTA NOT HAINTA 37728 37728	1340 1308 1373 1465 586 548 1NED 1NED 32615 1NED		
0364 CUSMUS 343 0364 CUSMUS 343 0374 METEOR 0478 METEOR 0478 METEOR 0478 METEOR 0478 METEOR 0558 INTELSAT 3 0558 INTELSAT 3 0558 OST 3 0678 CUSMUS 358 0670 0670				\$ <b>= 1</b>	74.0 74.0 81.2 81.2 ELEMENTS ELEMENTS 81.2 81.2 81.2 81.2 81.2 81.2	1467 1586 648 648 720 NOT HAINTA NOT HAINTA 37728 NOT HAINTA	1373 1465 586 548 1NED 1NED 189 289 32615 1NED		
037A METEOR 037A METEOR 046A 047A METEOR 047A METEOR 055A INTELSAT 3 055B SKYNET B 067A COSMOS 35B 067A 067A COSMOS 35B 067A COSMOS 35B 067A COSMOS 35B				:iio 이   의료우   이	24.0 81.2 81.2 ELEMENTS ELEMENTS 81.2 81.2 81.2 ELEMENTS ELEMENTS	1586 648 720 NOT HAINTA NOT HAINTA 879 877 87728 37728 NOT HAINTA	1465 586 586 548 1NED 1NED 189 789 32615 1NED		
037A METEOR 046A 046B 047A METEOR 047B 055B 065B 065A 067A 067A 067B 067C 067C 067C 067C 067C 067C 067C 067C				~	81.2 81.2 ELEMENTS ELEMENTS 81.2 81.2 110.1 ELEMENTS	648 720 NOT HAINTA NOT HAINTA 879 877 87728 NOT HAINTA	586 548 11NED 11NED 188 789 32615 11NED		
09378 0968 0968 0978 METEOR 0658 1NTELSAT 3 0658 0678 0678 0678 0678 0670 0670 0698 0708 0708 0708 0708		1 1 1 1		7	ELEMENTS ELEMENTS 81.2 81.2 10.1 ELEMENTS ELEMENTS ELEMENTS	NOT MAINTA NOT MAINTA 879 927 37728 NOT MAINTA	INED INED 818 789 32615 INED		
0468 0478 0478 0478 0554 0558 0558 0658 0678 0678 0670 0670 0670 0698 0708 0708 0708 0838 00408 371			1 1 1		ELEMENTS 81.2 10.1 ELEMENTS ELEMENTS 24.0	NOT HAINTA 879 927 37728 NOT HAINTA	11NED 818 789 32615 11NED 11NED		
047A METEOR 047B ST INTELSAT 3 055B INTELSAT 3 055B SKYNET B 067A COSMOS 358 067A COSMOS 358 067C 067C 067C 067C 067C 067C 067C 067C			1 1	242 9	81.2 81.2 10.1 ELEMENIS ELEMENTS	879 927 37728 NOT MAINTA	818 789 32615 LINED		
055A INTELSAT 3 055A SKYNET B 062A SKYNET B 067A COSMOS 358 067A 067C 067C 067C 067C 067C 067C 067C 067C		1   1	1 1	\$ <b>\$</b>   9	10.1 ELEMENTS ELEMENTS ELEMENTS	37728 NOT MAINTA	32615 LINED LINED		
0558 062A SKYNET B 067A COSMOS 358 067A 067B 067C 067C 069A 070B 070B 070B 070B 070B			1	9	ELEMENTS ELEMENTS	NOT MAINTA	LINED		
062A SKYNET 264A COSMOS 067A 067B 067C 069A 070A 070B 070B 083A COSMOS	44			CURRENT 93.2	EL EMENTS	NOT MAINTA	INED		
067A 067B 067C 067D 069A 070B 070B 078A 0089A 0089B	45	Ì			1 00	436	426		
0670 0670 0670 069A 070A 070B 070B 083A 0080S	45		_	106.8	7007	1210	948		
0670 0670 069A 070A 070B 079A 089A COSMOS		4515 US		8.901	1 00	1212	246		
069A 070A 070B 079A 083A CUSMOS	50	5036 US	27 AUG	103.5	90.2	946	901		
070A 070B 079A CUSMDS 083A CUSMDS	45		1 SEP	CURRENT	ELEMENTS	NOT MAINTAINED	INED		
0708 079A COSMOS 083A COSMOS	45	7	í	100.9	98-9	852	797		
083A COSMOS	\$4. 7.4	4513 US	3 SEP	100.9	98.9 65.3	1017	921		
	45	S	12 OCT	99.5	74.0	740	733		
0838	45	SM	- 1	4.66	74.0	739	-111		
	<b>₩</b>	4583 USSR	15 OCT	96.1	81.2	576 652	516		
1970 085C	63	S		95.1	81.2	575	471		
- 1	45	4588 USSR	1	100.5	1	793	75.0		
	4 u	4589 USSR	16 OCT	100.4	74.1	748	735		
1970 0860	53	S	1	1001	74.1	169	159		
- 1	45	4594 USSR	- 1	- 1	63.0	1812	532		124
0898 - 0890A	4	USSR 1155P	23 OCT	SEE NUIE 111.5	12.8	2022	569		
1	7,	Sn.		SEE NOTE		শ	25927		134
1970 093B	46			1197.7	13.8	36029	25932		
- 1	£#		-	104.8	74.0	1007	796		
1970 1028	24	4784 USSR	2 DEC	104.1	0.47	999	00 to		

DBJECTS IN ORBIT

LAUNCHES (CONT.)  1020 1026 1026 1026 1027 1027 1038 1038 4786 1038	####	104.3 104.3 102.9	74.0 74.0 74.0	974 981 914	945 946 875		
1020 5225 1026 8764 102F 9794 1034 605M05 382 4786 1038 4789	***	104.3 104.3 102.9 171.0	74.0 74.0	974 981 914	945 946 875		
102F 9794 103A COSMOS 382 4786 103B 4789	# 2 #	171.0	74.0	981 914 5313	946 875		
103A COSMOS 382 4786 4789	; #	171.0		6212	2442		
	2 DEC	158.8	51.6	5085	1587		
1970 103C 4790 USSR 1970 103D 5316 USSR	2 DEC	152.7	55.5	5085 4314	1612		
1036 12854	# :	1614	<b>5</b>	5000	1061		
106A NOAA 1 4793		114.8	101.6	1471	1421		
106C 8828	- 1	116.4	102.1	1543	1497		
1970 1088	1.2 DEC	104.5	7	977	9.4		
109B	#	97.8	15.0	695	62		
1970 1138 COSMUS 389 4813 USSR 4814 USSR	18 DEC	97.0	81.2	634	597		
1971 LAUNCHES							
1971 003A HETEOR +849 USSR	20 JAN	96.6	81.2	604	585	)	į.
1971 006A INTELSAT 4 F-2 4881 ITSN	NAT 95	P6 7	S NOT AVA	11 481 5	532	E NSI	
1971 0060	3 FEB	ELEMENTS NOT	VAV 10N S.	VILABLE	672	DOc NI	
1971 0090 US 5986 US	3 FEB	CURRENT		S NOT MAINTAINED	TAINED		
1971 011A TANSEI 1 4952 JAPAN	16 FEB	106.1	29.7	1107	988	o≱⊲ 40¢	
0118 5126 d 012A 4953		100.5	98.4	813	753	E	
012C 4957		97.8	98.3	669	637	X S	
012E 4963	17 FEB	98.3	98.2	691	660		
015B - 015CY	i	SEE NOTE		*			15*
020A COSMOS 400 5050	1	104.9	65.8	998	984		
1971 0206 9031 033K 1971 020C 5052 USSR	18 MAR	104.9	65.8	998	982		
021A 5053 F064		CURRENT	ı	NOT MAINTAINED	TAINED		
1971 0344 1515 3 STOR CANADA	21 MAX	113 S		NUI MAIN	IAINEU		
024B 5106	APR	113.5	88.2	1420	1351		
025A COSMOS 402 5105	1 APR	104.9	65.0	1025	953		
1971 028A CUSMUS 405 5118 USSR	7 APR	97.7	8172	704	587		

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	TION NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	KM.	KM.	FKE4•1MM2.)	NOIL
1971 LA	LAUNCHES (CONT.)									
١.	1A METEOR	5142	USSR	17 APR	95.2	81.2	540	515		
1971 0318		5143	assn	1	96.2		1,50	7		
1971 035A	5A COSMOS 407	5174	USSR	23 APR	100.7	74.0	807 810	761		
1971 0350	25	5300	USSR	1	100.4	74.0	789	767		
	50	5301	USSR	- 1	100.6	74.0	802	113		
	BA COSMUS 409	5180	USSR	28 APR	109.3	74.0	1207	1177		
1	88	5304		7 MAY	EI EMENTS	Ş	AVATI ABI F			
1971 0398	40	5205	us.		EI EMENT	N	VATLABLE			
ــ ا	1A COSMOS 411	5210	USSR		113.8		1488	1314		
- 1	1	5211	USSR	Z MAY	116.1	74.0	1534	1677		
1971 0410	COSMOS	5212	USSR	7 MAY	115.7	74.0	1506	1471		
- 1	CUSMOS	5213	assn	1	4		158			
	COSMOS	5214	USSR	7 MAY	115.4	0.4	1498	1369		
1	SOMSO	6176	355	7 % %		0 42	0041	1341		
	16 CUSMUS 417	5210	2000	7 MAY	114.8	74.0	1491	1397		
1 0 0 1 0 1	2000	F218	assii	7 MAY	116.8	74.0	1590	1485		
1971 0413	IS MARS 2	5236	92511		AREDC	ARENCENTRIC DRRIT	L			
<u> </u>		5238		22 HAY	105.0	74.0	1003	982		
- 1		5239	USSR	- 1	104.9		- 1	978		
	MARS 3	5252	USSR		AREDC					
- 1	1A MARINER 9	5261	S	1	AKEUL					
		5267	Sn	30 MAY	HELIO	HELIOCENTRIC OR	08811 1556	370		
1	CA LUNKUS AZA	6655		t		4,2	1508	372		
		2876	USSK 1000	200 + 4	95.6	2.0	553	540		
1	SA METEUK	5330		16 11	4.40	81.2	444	523		
1971 0598	96 30 ADOLLO 15	5775	11S	- 1	SELEN	1	DRBIT			
1										
1971 0678	١	5397	SII	2 AUG.	101.8	87.6	805	779		
		5398	SN	7 AUG	101.4	87.6	882	177		
1921 0671	7.7	5405	SII	7 4116	100	R to b	813	975		
	X.	5395	S :	7 AUG	101.	67.0	199	724		
1	76	6666	25	7 116	100.2	87.6	118	720		
	Ę	00t0	2 2	204 ~	101.6	87.6	895	270		
3070 1201		5426	USSR	12 AUG	100.4	9.64	871	619		
	14 5015 1	56.35	FRANCE	- 1	100.2	50.2	870	499		
0120 1201		5638	511		10001	50.2	867	662		
	J. C.	5440	Sn	- 1	98.8		789	614		
	0738	5449	USSR	•		ں	ORBIT			
1971 08	OBOA SHINSEL	5485	MAGAL	- 1	1	25.0	200			
		5498	JAPAN		111.9	1.9 32.0	1759	200		
	082A LUNA 19	5488		d,			TOOL			
		5490	USSR	28 SEP	SELEN 114.1	A-1 74.0	UKDI 1 1506	1319		
1				l	114.4	74.0	1509	1348		
80 T/6T	CARON COSMUS 443		2000	, ,	114.8	74.0	1510	1379		

	AVAILADED	3	CECHENT	NA D	1000	7077	COSMOS 474	
	AVAILABLE		ELEMENT	MAR	S	5851		1972 010A
945	993	74.1	104.5	25 FEB	USSR	5847		- 1
962	996	74.0	104.7		USSR	5846	COSMOS 475	1972 009A
		SECUNDOCENTRIA		<del> </del>	4888	5836		
587	36551	28.3	653.6		SU	5816		
15903	35923	<b>1</b>	1442.6	23 d*N	<del>  1</del> 50	5775	TATEL SAT & F-4	
							#ES	1972 LAUNCHES
245	854	2	101	ŧ	-USSR	15344		1
846	867	81.3	102.1		USSR	8827		
823	956	81.2	101.7	1	USSR	8826		1
841	875	81.3	102.1		USSR	5732		
168	616	1	102.5	29 0EG	USSR	5731	MCTEOR	1
393	2151	74.0	111.0		USSR	5730	9 9	
202	2192	2		k :	45.5	5730	T	
932	1024	64.5	104.7		USSR	5721	COSMOS 469	
35440	36645		1454	10 OF C	155	5709	TATE SAT A F-3	
769	788	74.0	100.4		USSR	5858		_ '
771	797	7	100.5	7 0.0	4558	5779		ł
761	80.	74.0	100.5			5707		- •
777	707		100	2 000	H6 66	5305	COCMOC ACA	
967	400	74.0	104-7	12 050	ASSI	5685	Cost conces	1971 1118
	AVAILABLE		ELEMENTS	14 DEC	US S	5682		
	-	TS NOT	STEASON S	1	- 65	1896		1
			ELEMENTS.		S	5680		_
	**************************************	He Not	- GLENEATS	1 2 2	\$	5673		1971 1108
	_	TS NOT	ELEMENTS	14 DEC	SO	5678		•
***	1208	74.0	109.3	1	USSR	5615		1
1181			109.4		USSR	5614	COSMOS 457	•
TATALO	L	<u>_</u>	CURRENT		S	5973		
272	18149	3.2	322.8	15 NOV	SU	5598	EXPLURER 45	
36030	27227	9 6	1681 7	2 204	6	5560		ł
25700	25820	9 6	•	- 1	100	5588		1971 0958
35745	1493	1.28	105.5	28 UCT	<u> </u>	5581		
236	1989	44	100.0	- 1	\$	0866	PRUSPERU	
752	777	92.7	100.1		SO	5560		•
780	876	99 0	101.5	- 1	HS.	9956		- 1
782	861	99.0	101.3	L4 OCT	S	5557		
1500	1622	7	117-3	13061	HSSR	5555		1971 0860
1487	1571	74.0	116.6	13 OCT	USSR	5554	COSMOS 451	1971 OB6H
1461	1526	74.0	115.9		USSR	5553		1
1481	1539	• •	• •	13 OCT	USSR	5552	_	•
1438	1515	740	115.5	۲	HSSB	5551	Ļ	ı
RO# T	7161	74.0	115.1	13 OCT	CUUK	0000	COSMOS 447	1971 0860

INTER-NATIONAL DESIGNATION

NAME

NUMBER SOURCE

LAUNCH

MINUTES

NATION

APOCES KM.

ERICEE KM.

FREQ. (MHZ)

NOTES

DBJECT'S IN DRBIT

SH 39A9 LANISIRO ATIJAUQ ROOG 40

NATIONAL . DESIGNATION	IN NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	KM.	XM.	FREQ. (MHZ)
1972 LAUNCHES	HES (CONT.)								
1972 012A	PIONEER 10	5860	Sn	3 MAR	SOLAR	SOLAR SYSTEM ES	ESCAPE TRAJECTORY	CTORY	
l		5903	Sn	Į į	101.5	<b>.</b>	898	788	
- 1	- 1	5904	SI		101-4	99-1	861	788	
1972 019A	COSMOS 480	5905	USSR	25 MAR	109.1	83.0 83.0	1199	1168	
1	METEOR	5917	USSR	1	102.4	81.2	879	860	
		5918	assi	1	202.5	278	927	213	
1972 023E	PRICKINZ	5941	USSR	31 MAR 14 APR	173.0 CURRENT	52.2 IT ELEMENTS	S NOT MAINTAINED	ZIS TAINED	
	LUNAR MODULE	6005	ns	16 APR	SELEN	RIC	ORBIT	3	
1972 035A	CUSMUS 689	6020	USSR	6 MAY	104.5	0.42	987	955	
- 1	INTELSAT 4 F-5	6052	1150	ı	1438.8	34	35852	35826	
1972 0418	404 0000	6058	US USCE	13 JUN	651.8	26.1	36551	496	
1		6061	USSR	1	100.4	74.1	193	760	
		6063	USSR	- 1	100.3	76.1	781	763	
1972 0430	METODO	6065	USSR	23 JUN	100.5	74.1	798 896	766 880	
		6080	USSR	1 1	102.9	81.2	930	858	
1972 057A	COSMOS 504	6117	USSR	20 JUL -	113.9	74.0	1494	1319	
1972 0578	CDSMDS 505	6118	USSR	20 JUL	114.3	74.0	1494	1350	
1972 057D	1	6120	USSR	[ 1	114.9	74.0	1495	1409	
1972 0575	COSMOS SOR	6121	assn	20 1111	115.3	74.0	1494	1441	
1972 057F	COSMOS 509	6122	USSR	20 JUL 20 JUL	115.6	74.0	1495	1472	
		6124	USSR	•	116.4	74.0	1544	1493	
ł	1	6125	USSR 	20 1111	117.0	0.00	911	897	
1972 USBA	LANUSA! I . OSA IK	0719	3 4	23 JUL	ı	7	711,		
l	COSMOS 514	6148	USSR	16 AUG	104.3	83.0	967	951 948	
1		5277	USSR	16 AUG	104.1	82.9	956	947	
1972 065A	COPERNICUS	6153	Sn		99.4	35.0	736	725	
- 1		6155	J S	↲.	4	04:		253	
1972 066A	COSMOS 516	6154 6173	USSR US	21 AUG 2 SEP	104.5	90.08	1017	721	
		6180	Sn	2 SEP	100.0	90.0	802	714	
1972 0696	CHSMIS 520	6250	USSR	19 SFP	715.2	67.5	34528	5698	
- 1		6302	USSR	٩	706.7	67.5	34097	5710	
	EXPLORER 47	6197	SU	23 SEP	CURRENT	NT ELEMENT	S NOT MAINTAINED	TAINED 988	
1972 0748		6207	USSR		104.8	65.8	1000	965	
		6210	HSSN	29 SEP	104.9	65.8	200	985	
1972 076A		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	_		1				

HAINTAINE HAINTAINE BB4 TRAJECTORY TRAJECTORY 185 185 185		115.3	NUL 8	,	6676		
HAINTAINE HAINTAINE B84 TRAJECTORY TRAJECTORY 182 35		102.5	-	USSR 29	6660	COCHOC SAA	1973 0348
HAINTAINE HAINTAINE 1884 1782 TRAJECTORY 1783	2	102.3	9 MAY	USSR 29	6659	ME TEOR	1973 0344
MAINTAINE MAINTAINE B84 TRAJECTORY		1443.1		DA		ANIK A2	
TRAJECTORY		r ·	1		6425		1
IT MAINTAINED IT MAINTAINED 884 863	SASIEM ESCADE	S dv IUS	ADR	115 6	6621	DIONEER 11	OCTO CICT
T MAINTAINED		102.4			6392	30 - ECX	
T MAINTAINED	STA	CURRENT	- 1		6380		
	_	CURRENT			6364	PROGNOZ 3	
390 557	50.7	96.2	O JAN	USSK 26	6350	CUSMUS 546	1973 005A
	,2	92.6		USSR 28	6329		
763 744	74.1	99.9	5 DEC	USSR 2	6391		1972 104C
	***	100.2	- 1		6324		- 1
	_	100.5		USSR 25	6323	COSMOS 540	
		1223	1		6320		
1378 1339		112.9		~	6319	COSMOS 539	
HOT MAINTAINED	ŧ,	CURRENT			1		1
NOT MAINTAINED	ELEMENTS NOT	CURRENT	20 DEC	US 20	6317		1972 1014
		107.1			6306	NI TIBUS S	
			- 1			•	- 1
	98.9	101.5		•	6276		
395	86.6	101.4	401	9	6275		1972 089
		116.6	YON 1		6271		
		114.3	1 XOX	USSR	6270	1	1
		113.9	YON 1	USSR	6269		
			NOK.	HSSP.	6268	1	1
		112.4	NUA	HSSR	6267		
1467 1410	74.0	114 7	T NOV	1000	4364	COCKOS 531	1072 0070
		112 0	NOV	1880	9969	CUSTON SET	1
		114.1	Y NOV		7979		
		402.5	- 1		263	3	- 1
		102.4	26 OCT		6256	METEOR	
		108.3			\$227		1972 0826
					6236	AMSAT-OSCAR 6	
	֓֟֟֝֟֓֓֓֓֓֓֓֓֓֓֓֓֓֓֟֓֓֓֓֓֓֓֓֟֓֓֓֓֓֓֟֓֓֓֓֓֟֓֓֓				6235	NGAA 2	1
		114.6			6824		
1463 1404	95.6 L	114.7		100	2290		1972 0790
			- 1		622		- 1
	98.7	99.3	2 OCT		6218		

INTER-NATIONAL DESIGNATION

NAME

NUMBER SOURCE LAUNCH

MINUTES

NATION

APOGEE KM.

PERICES TRANSMITTING
KM. FREQ.(MHZ)

NOTES

OBJECTS IN ORBIT

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024E CDSHUS 645 7269 USSR 23 APR 114.3 74.0 1479 024F CDSHUS 646 7270 USSR 23 APR 114.7 74.0 1483 024G CDSHUS 647 7271 USSR 23 APR 114.7 74.0 1482 024G CDSHUS 648 7272 USSR 23 APR 115.1 74.0 1482 024H CDSHUS 648 7272 USSR 23 APR 115.1 74.0 1488	0240					114.1	74.0	1479	1351		
024F CDSMUS 646 7270 USSR 23 APR 114.7 74.0 1483 024G CDSMUS 647 7271 USSR 23 APR 114.9 74.0 1482 024H CDSMUS 648 7272 USSR 23 APR 115.1 74.0 1488 024J CDSMUS 648 7273 USSR 23 APR 115.1 74.0 1488	024E				- 1	114.3	740	1479	1367		
0244 CUSMUS 647 7271 USSR 23 APR 114.9 74.0 1482 024H CUSMUS 648 7272 USSR 23 APR 115.1 74.0 1488 024J 7273 USSR 23 APR 117 74.0 1488	0245				-	114.7	74.0	1483	1401		
024J 7273 HSSR 23 APR 117 7 0 1/48	9450	ł				114.9	74.0	1482	1420		
	024J				. 1	117.0	74.0	1606	1435		

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MATIONAL		CATALOG							
DE SIGNATION	ION NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	км.	KM.	FREG. (MHZ)
1974 LAUN	LAUNCHES (CONT.)								
_		7275	USSR	24 APR	102.5	81.2	918	833	
1976 026F	A RULMITA Z=S	77.7	HSSB	26 APR	732.6	63.5	39048	2035	
- 1	A COSMOS 650	7281	USSR	- 1	113.4	74.0	1398	1366	
		7284	USSR		113.2	74.0	1387	1362	
1974 029A	COSMOS	7291	USSR	d	103.4	65.0	959	879	
1974 032A	A COSMOS 654	7297	USSR	17 MAY	104.4 FI EME	4.4 64.7 FLEMENTS NOT AV	VAIL ABLE	916	
1		7315	USSR	-	SELEN	ပ	ORBIT		
- 1	A AIS 6	7318	SH	- 1	1412.1	7.2	35666	35183	ı
		7324	SD:	30 MAY	1430.6	7.3	35782	35577	
1976 OF 61	A CUSMUS 660	7238	800F	NI O	105.0	7.68	1598	393	1
1974 0446	B CDSMOS 663	7349	115 SP	- 1	104.7	82 9	1000	196	ŧ
ł		7350	USSR	•	104.6	82.9	988	096	
4050 ATE1	A COSMOS 665	7352	USSR	-1	718.3	66.5	38643	1739	ı
		7354	USSR	29 JUN	4.707	66.6	38353	1488 1488	
1	A METEUK	1365	2001		102.5	R1.2	910	847	•
1974 0564	D «	7369	033K	- 1	468.7	126.9	13761	13459	
Ι.	ں	8599	SN	14 JUL	CURRENT	NT ELEMENT	S NOT	MAINTAINED	
- 1	A MOLNIYA 2-10	1376	USSR	4	717.6	63.8	39310	1037	ı
		7382	USSR	23 JUL	733.9	64.3	39316	1831	
A040 4761	A MULMITA LES	747	SI	9 Aug	101.4	98.6	859	191	1
	to	7412	SII	•	101	2 88 7	861	192	ı
	A COSMOS 673	7417	USSK	16 AUG	95.4	81.2	547	529	
1974 0668		7418	USSR		96-1	81-2	909	956	1
		8424	USSR	16 AUG	94.8	24.1	1422	1361	
1	A CUSAUS 675	76.47	200	L	113.5	74.7	1420	1351	ı
1974 0595	B A COSMOS 676	7633	USSB	- 1	100	74.0	808	784	1
		7434	USSR	11 SEP	100.6	74.1	806	171	
- 1	C	8756	USSR		000		017	787	1
1974 0710	0 4 708307	8829	325	11 SEP	116.6	76.0	1465	1394	1
1974 0728	CUSMOS	7436	USSR	١	115.9	74.0	1530	1465	
- 1	COSMOS	7437	assn	19 SEP	115.7	74.0	1509	1464	1
	COSMOS	7438	USSR	-	115.5	74.0	1490	1464	
	SOMSOO	7439	2557	19 SEP	115.3	74.0	1664	1451	•
	F CUSMUS 682	7440	2001		114.9	74.0	1464	1632	,
1976 072H	COSMOS	7442	USSR		114.7	74.0	1464	1414	
1976 072		7443	USSR			7	1683	100	•
	A WESTAR 2	7466	S	10 001	1436.2	2.5.2	35795	35781	ı
- 1		2047	200	1	105.0	0 2 0	1015	040	r
1974 079A	A CUSMUS 689	747	USSK	18 OCT	104.8	82.9	1012	096	
1974 OBIA	A MOLNIYA 1-28	7480	USSR		684.2		38576	109	

				•			- יייייייייייייייייייייייייייייייייייי	7.0		1975 0160
		1393	1486		1100	74 45	400	1000	CASWAG TI	
		1409	1488	74.0	114.9		USSR	7679	COSMOS 712	
		1460	1498	74.0	1154	- 1	USSR	7678	- 1	- 1
		1360	1400	69.2	113.3	73	USSR	7665		
		1367		\$		1	USSA	7663	COSMOS 708	1975 OLZA
			AVAILABLE	S NOT	ELEMENT	6 FE FE FE	SO	7648	SMS 2	
		700	1100	600		7 7 7 7	# 2 A C F	7659		ı
		700	1004	40 0	102.0	1	EDANCE	7655		
		802	1132	9.0	104.4	י היה פ פור פ	TRANCE	7654		1975 0106
		885	1108						JI ANLETTE	
		86	39451	64.0	701.3	6 FEB	USSR	7653	07.01.5.775	
		124	36733	63.9	648-1	- 1	USSR	7641	MOLNEYA 2-12	- 1
		5130	35161	68.1	716.5		USSR	7629		
19#		2962	19*	1E	SEE NOT	22 JAN	US	7625	004HG	1975 004B -
	. [	106	913	0.66	103.1	22 JAN	Sn	7615	LANDSAT 2	1975 004A
	•								ES	975 LAUNCHE
		960	982	82.9	104.5	8	USSR	7594	1	
		517	40631	62.6	733.9	21 DEC	USSR	7586	COSMOS 700	1974 1050
	•	587	29770	***	8-212	1	USSR	7583	MOLNIYA 2-11	- 1
	•	437	37321	12.9	665.8		SS	9330		
		812	910	81.2	102.2	17 DEC	USSR	7578	-SINDHONIE-A	1974 1014
	1	838	883		102.2	*	USSR	7574	** + C O X	
	•		ORBIT	HELIOCENTRIC	HELIOC		FRG	7570		
		MAINTAINED	TOT	CURRENT ELEMENTS	CURRENT	10 DEC	55	7569		1974 0976
	1		ORBIT		#EL106		 		MEE 103 1	- 1
	1	297		28.3	104.6		S	7550		
		26909	25922	200	1637.0	ł	¥ 8	7547	-SKYNCT-28	
	1	10469	26640	,	2 2 2 3 4	21 NOV	561	7545		
		323	40815	64.4	733.7		USSR	7546	INTELSAT A EAG.	1974 092E
,	1	18	38638	1 to 1	684.8	-31 NOV	USSR	7540	MUL NI XA JAI	- 1
18*	1		18*	NOTE	SEE NO		Sn	•	_	
		1438	1457	101.5	114.8	ADN CT	50414	7631	TATASAT COCAR	1974 0896
		1	1456	101.5			5	7530	36 75	
		838	905	81.2	102.4	-	USSR	15521		1974 083C
	1	919	905	•	•	1	un i	2493		- 1
	ı	22.8	805	81.2	102.3	28 OCT	USSR	7490	METEOR	1974 083A
									HES (CONT.)	1974 LAUNCHES
NOTES	FREQ. (MHZ)	X .		NATION	MINUTES	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION
			***************************************	2 2005 2						

DBJECTS IN URBIT

INTER-		CATALOG			PERIOD	I NCI I-	APOGEE	PERIGEE	TRANSMITTING	
DESIGNATION	IN NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	KM.	KM.	FREQ.(MHZ)	NOTES
1975 LAUNCHES	HES (CONT.)								1	
1975 016F	COSMOS 716	7683	USSR	28 FEB	115.9	74.0	1512	1477	ļ	
1	1	7685	USSR	ļ	115.0	74.0	1488	1426		
1975 016J		7686	ussi Us	28 FEB 10 MAR	CURRENT		N P	MAINTAINED	1	
- 1	000.144	7688	SIL	10 MAR	102.4	IT ELEMENTS		MAINTAINED	1	
1975 023A	MEIEUK	7715	ASSI	- 1	102.5	81.2	913	836	ı	
ŀ	COSMOS 723	7718	USSR	2 APR	103.7	64.7	952	911 865		
1	1	7734	Sn	9 APR	101.7	115.0	647	826		
1975 0278		10728	Sn	9 APR	101.6	115.2	882	788	1	
		10730		- 1	103.7	9.411	1021	841	1	
i .	COSM05 726	7736	USSR	11 APR	104.5	83.0	990	952	į	
	MOLNIYA 3-2	7738		Ι.	717.9	62.5	39686	671		
1975 0290	ARIAHAT	7752	INDIA	19 APR	95.2	50.7	539	512	-	
- 1		1753	assn		93.2	50.7	100	417	1	
	COSMOS 729	7768	USSR	22 APR	104.9	83.0	1004	9712		
	MOLNIYA 1-29	7780	USSR		717.8	63.8	37973	2382		
1975 0360 1975 038A	ANIK A3	7790	CANADA	7 MAY	1439.2	1.8	35903	35790	I	
- 1		7794	SH	Z MAX	483.2	24.3	21113	267	ı	
	INTELSAT 4 F-1	7815	1750	22 MAY 22 MAY	1436.0	1.7	35787	35784	ı	
1		7816	Sn	24 MAY	EL EMENTS	TON S	AVAILABLE		!	
1975 045A	COSMOS 732	7820	USSR	1 -	114.6	74.0	ı.	1402	ı	
- 1	- 1	7822			2.911	28.0	1552	Rysi	1	
1975 0450	COSMOS 734	7823	USSR	28 MAY	115.0	24.0	1472	1459	1	
	1	7825	USSR		115.5	74.0	1485	1467		
1975 0456 1975 0456	COSMOS 737 COSMOS 738	7827	USSR	<b>T</b> –	115.7	7.0	1507	1466	1	
1975 045H	COSMOS 739	7828	assn	1	4 .	7 6 6	1603	1483	1	
	MOI MINA 1-20	7931	USSK	S HAT	717.6	63.8		354		
1	SRET 2	7910	FRANCE	NO W	CURRENT	NT ELEMENT	S NOT	MAINTAINED	1	
1975 050A	VENERA 9	7915	USSR		HELIO	HELIDCENTRIC O	ORBIT	1383		
1975 0510		7938	Sn	NOL 8	113.2	95.0	1404	1342		
		7939	SM	- [	113.9	95.2	1425	1383		
1975 052A	NIMBUS 6	7924	US US	12 JUN	107.4	99.6	1111	1092		
1	VENERA 10	7947	USSR	14 JUN	HELIO	-	ORBIT	4		
1975 055A		7963	SH	8	LUKKEN					

1	145		100	1	4	VC.00	COD1 T		
727	755	74.1	99.7	SEP	) () ()	USSR	16965		0940
763	799	74-1	100.5	56.0		U\$ 5 R	934		
779	796	74.1	100.6	SEP	30	USSR	8343	COSMOS 773	094A
503	3666	2	1	*	1	£5	237		9160
35784	35792	1.7	1436.2	SEP		1130	8330	INTELSAT 4A F-1	091A
1164	1104	83.0	109.1	ב ה	2,	1555	926	1	0898
822	910				- 1	9331	2228	COSMOS 770	1975 0894
800	918	81.3	102.1	SEP		USSR	8293	METEUR	1975 087A
1	1483	1	1	5	+	8558	8295		0000
1470	1489	74.0	115.5	SEP	17	USSR	8292	COSMOS 768	086H
1463	1495	7	115.3	\$ 1	+	USSR-	8291	- 1	0866
1416	1483	74.0	114.9	SEP	17	USSR	8290		086F
1476	1549	2	116.3	SEP	1:	USSR	8289	ı	- 1
	1834	3	116.0	ŝ	17	SSSI	8288		1975 086D
1436	1482	74.0	115.1	SEP	17	USSR	8286	CORNOC 763	0000
1397	1480	1	1144	\$	1	955B	8285	- !	1717 000A
	ORBIT		HELIDCENTRIC	SEP	9	SO	8272		1975 0838
717	DRAIT	1 '	ARROCKATATO		þ	- SP	8199	VIKING ORBITER 2	6834
974	1102	47.0	105.9	SEP	9,	JAPAN	8352		1975 082B
2542	38600	64.1	733.8	SEP	 	O V V X	9148	***	4280
2312	38044	63.0	717.8	1	<b> </b>	U\$58		HULNIA 2-14	GEID
206	10977	64.1	734.7	SEP	2	USSR	8274		1975 079E
117	21748		552.8	\$	ا د	USSR	8187	TE-T WAINJOH	ı
	10892	3	655.2	A A	27	us s	8134		-
35870	35873	5.4	1440.5	A UG	27	FR/FRG	8132	VIMPHUNIE+B	1975 0778
550	418		96.4	\$16	-22	USSA	8128		ı
557	566		95.9	AUG	22	USSR	8127	COSMOS 756	1975 076A
	ORBIT	۲c	AVERCENTATOR AND	Š	ا د د	£ 5	1118		-
863	997	- 45	192005N		3 1	, s	8018	VIKING ORBITER 1	
967	1006	82.9	104.8	AUG C	14	USSR	8072	COSMOS 755	1975 074A
A1 NEU	13 NUT MAINIAINEU	CLEBER!	1201	200	ļ,	£;	8063	- 1	ł
829	۱,	C A	CHOOSIT	<u>ا</u> و	٠	E 5 3	8062	COS-8	-
848	884	81.3	102.3	֖֖֖֖֖֖֝֟֝֟֝֟֝֟֝֝֟֝ ֓֞֞֞֓֞֞֞֞֓֓֓֞֞֞֞֜֓֞֞֞֞֓֓֓֞֞֞֜֡֞֡֓֞֩֞֞֡֓֞֩	: <u>-</u>	USSR	8039		1975 0640
833	218	-	102.4	Ė		25.58	802		
851	879	81.3	102.3	ב	===	USSR	8026	METEOR 2	_
2654	38448	\$	733.0	ŧ		USSA	8618	1	- 1
1596	37942	63.9	718.2	ב ב	8	USSR	8015	MOLNIYA 2-13	1975 063A
5 4	605 505	22.0	90.1	202	2	45 C	7970	<del>8 080</del>	
532	561					93311	7060		
ALNEU	Z		CCRRENT				7049	CHEMOS 744	1075 0564

INTER-NATIONAL DESIGNATION

NAME

NUMBER SOURCE LAUNCH

MINUTES MINUTES

NATION

ADDCES.

PERICES TRANSMITTING
KM. FREQ. (HHZ)

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OBJECTS IN ORBIT

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LAUNCHE 0977 0977 0997 1008 1008 1008 1008 1008 1008 1128 1128 1128 1180 1180 1180 123		$ar{lpha}$	5	S RENT RENT RENT RENT RENT RENT RENT RENT	25.7 25.7 25.7 25.7 25.7 25.7 25.7 25.7	35930 35930 35930 10343 999 999 999 998 1034 1015	35748 35748 528 35773 266 969 959 2437 263 785 773 785 773 785 773 785 773 785 773 785 773 785 773 785 773 785 773 785 773 785 773 785 773 785 773 785 773 785 773 785 773 773 785 773 785 773 785 773 773 785 773 785 773 785 773 773 773 773 773 773 773 773 773 77	136.380	
LAUNCHE 097F 099A 1008 1008 1003A 1003A 1005B 105B 112A 112B 112C 112C 112B 113A 113B 113B 113B 113B 113B 113B 113				88 31 1000000 1 1 1 1 1 1 1 1 1 1 1 1 1 1	25.7 25.7 25.7 25.7 25.7 26.0 26.0 26.0 26.1 26.1 26.1 26.1 26.1 26.1 26.1 26.1		35748 528 35773 266 969 959 2437 2437 2437 2437 268 785 785 793 898 35887 NTAINED	136,380	*
097F 0997F 1000A 1000A 1003A 1038A 1128A 1120 1120 1120 1130A 1130A 1130A 1130A 1131A 1230A				8 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	25.7 25.7 25.7 25.7 26.0 26.0 26.1 26.1 26.1 26.1 26.1 26.1 26.1 26.1		35748 35773 266 969 969 2437 2437 2437 2437 2437 2437 3583 35887 NTAINED	136.380	*
1000 1000 1000 1000 1000 1000 1000 100				##   #	23.7 23.7 23.0 24.0 24.0 24.1 24.1 24.1 24.1 24.1 24.1 24.1 24.1		35773 266 969 959 2437 2437 768 773 793 898 35887 NTAINED 452 266	136.380	*
100A 1003A 103A 105A 105A 112A 112A 112A 113A 113B 121A 121A 123A 123A 123B				200111000000	23.6 83.0 66.0 66.0 74.0 74.1 74.1 74.0 NOT NOT NOT ELEME ELEME ELEME FLENE FL		266 969 2437 2437 2643 785 773 793 898 35887 874 872 266		
103A 105A 105A 112A 112B 112C 112C 113A 113B 121A 121A 123A 123B 123B				104.8 717.8 717.8 717.8 733.9 100.8 100.9 104.2 104.2 104.2 104.2 104.2 104.2 104.2 104.2 104.2 104.2 104.2 104.2 104.2 104.2 107.9 108.8 10	83.0 66.0 74.1 74.1 74.1 74.1 74.1 74.1 10.1 10.1 10.1 10.1 10.1 10.1 10.1 1		969 959 2437 2643 765 773 768 193 898 35887 NTAINED 452 266		
105A 105A 112A 112C 112C 112C 113A 118C 118C 118C 121A 123A 123B 123B				717.8 733.9 100.8 100.3 100.3 104.2	24.1 24.1 24.1 24.1 24.1 24.1 26.1 26.1 26.1 26.1 26.1 26.1 26.1 26		2437 2663 765 773 773 773 768 793 898 35887 NTAINED 452 266		
1128 1128 1128 1128 1120 1138 1180 1210 1210 1238 1238 1238				100.8 100.8 100.3 100.3 104.2 104.2 104.2 104.2 104.2 104.2 104.2 104.2 108.2 117.0 730.9 1130.9 1130.9 114.8	74.1 74.1 74.1 74.1 NOT NOT NOT NOT NOT NOT NOT NOT NOT NOT	1	785 773 768 793 898 35887 35887 NTAINED 452 266	1 1 1 1 1	
1128 1126 1126 116A 118A 1180 1180 1210 1230 1230 1236				100.3 100.3 100.3 104.2 104.2 104.2 104.2 108.5 ELEMENT 717.0 730.9 CURRENT 717.0 730.9 CURRENT 730.9 CURRENT 888.4	74.0 74.0 74.0 74.0 74.0 100 100 100 100 100 100 100 100 100 1		773 768 793 898 35887 35887 NTAINED 452 266	1 1 1 1	
112C 112C 116A 118A 118C 118D 121A 121A 123A 123A 123E 123E				100.3 100.9 104.2 104.2 104.2 104.2 108.6 108.6 108.9 10.9 10.9 10.9 10.9 10.9 10.9 10.9 10	74.0 74.0 72.1 85.1 NOT NOT ELEME NOT NOT NOT NOT NOT NOT NOT NOT NOT NOT		768 793 898 35887 35887 NTAINED 452 266	1 1 1	
116A 117A 118A 1180 1210 1210 1234 1236 1236				104.2 1445.5 ELEMENT ELEMENT 717.0 730.9 CURRENT 730.9 ELEMENT 891.4	65.1 NOT NOT NOT ELEME 64.1 ELEME NOT		35887 35887 NTAÍNED 452 266 NTAÍNED	· • •	
113A 113A 113C 113D 121A 123A 123A 123E			1 1 1 1 1	ELEMENT CURRENT 717.0 730.9 CURRENT ELEMENT 891.4	NOT NOT ELENE 64.1 NOT 46.5	1	NTAINED 452 266 NTAINED	<b>.</b>	
1180 1180 121A 1210 123A 123A 123E				CURRENT 717.0 730.9 730.9 ELEMENT 991.4	NOT ELEME 64.1 64.1 ELEME 1 NOT 46.6		NTAINED 452 266 NIAINED		
1180 1210 1210 1234 1230 1236 1236				717.0 730.9 730.9 CURPENT 891.4	S4-1 NOT NOT		NIAINED 266 NIAINED		
1210 1234 1230 1230 1236 1236				730.9 CURRENT ELENENT 391.4	NDT NDT NOT 16.5	40733 NOT MA 11. ABLE 22375	266 NTAINED	ı	
122A PROGNOZ 123A RADUGA 1230 123E	8510 8513 8546 8547 11568			391.4 488.4	N 20 9	1LABLE 22375	MINIMEN		
1230 123E 123E	8546 8547 11568		- 1	488.4	46.6	22375		1	
123E 123E	8547 11568			488.4	46.6		317	l	
46.54	9001		יים יינ	7 7 7 7	, L	28067	266 30046	ì	
1910 1648 MEIEUR	8519	USS		102.2	81.2	885	840		
1248	8520	251	-	102.4		7 1 491 5		•	
1975 125A MOLNIYA 3-4 1975 125F	8521	USSK	27 DEC	729.3		40677	245	ı	
1								1	
1976 DO34 HELLOS 2	8582	2 ERG	15 JAN	HELIDCENTRIC	- 1	DEBLI		1	
	8583	S O O S	15 JAN	HELIOCENTRIC		ORBIT		1	
004A	8585	٦	Ι΄.	1435.2		35837	35698	,	
1976 0058 CUSMUS (89	8597	SSN	1	104.8	83.0	1000	196	l	
		33	22 JAN	695.4	0.49	36971	2274	1	
1976 0060 1976 0084 COSMOS 791	1018	Z USSR	ာ ရ	116.7	78.0	1686	1399	1	
OOSB COSMOS	8098	USS	•	115.1	74.1	1488	1434		
1976 008C CDSMDS 793	9609	WSSE O	28 JAN	115.3		1492	1449		
COSMOS	1198	SSI	- 1	115.6	14	1496	1465		
JUBE COSMOS	8612	SSO	-		74.1	1514	1469		
- 1	4614		ZB JAN	116.3	74.1	1552	1476		
	8615	S	أمه	117.9	14.1	1694	1481		
	F-2		29 JAN	1436.1	8.1	35810	35761		

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8645 USSR 3 FEB 105.0 83.0 1009 977 8646 USSR 12 FEB 104.8 83.0 990 983 8688 USSR 12 FEB 195.8 65.9 589 529 8697 US 19 FEB 214.5 24.4 10719 265 8702 US 19 FEB 105.1 69.7 1009 987 8710 JAPAN 29 FEB 105.1 69.7 1009 987 8741 USSR 11 HAR 717.6 63.2 39519 826 9411 USSR 12 HAR 731.0 63.5 40212 792 8744 USSR 12 HAR 106.8 83.0 1762 389 8745 USSR 12 HAR 105.2 83.0 1762 389 8747 US 15 HAR 105.2 82.9 162.4 381 8749 US 15 HAR 105.1 22.7 35806 35783 8752 US 15 HAR CURRENT ELEMENTS NOT MAINTAINED 15 HAR 1420.9 5.8 81.2 568 544		35994	36518	1.3	7.0061	1	USSA	8799	EOR CO	- 1
USSR 3 FEB 105.0 83.0 1009 977  USSR 12 FEB 95.8 65.9 589  USSR 12 FEB 104.1 5.8 35800 3573  USSR 19 FEB 1436.1 69.7 1012 988  USSR 11 MAR 717.6 63.5 40212 792  USSR 11 MAR 731.0 63.5 40212 792  USSR 12 MAR 105.2 82.9 1624 381  US 15 MAR 1436.1 22.7 35806 35783  US 15 MAR 1436.1 22.7 35806 35783  US 15 MAR 1465.6 23.1 36917 MAINTAINED  US 15 MAR 1465.6 23.1 36917 MAINTAINED  US 15 MAR CURRENT ELEMENTS NOT MAINTAINED  US 15 MAR 1436.1 23.7 35604 36473		524	605		96.0			8774	RCA SATCOM I)	-
USSR 3 FEB 105.0 83.0 1009  USSR 3 FEB 104.8 83.0 090  USSR 12 FEB 95.8 65.9 589  USSR 12 FEB 1436.1 5.8 35800 35  USSR 12 FEB 105.1 69.7 1009  JAPAN 29 FEB 105.1 69.7 1012  USSR 11 HAR 717.6 63.5 40212  USSR 11 HAR 731.0 63.5 40212  USSR 12 HAR 105.2 82.9 1624  USSR 12 HAR 105.2 82.9 1624  US 15 HAR 1436.1 22.7 35788  US 15 HAR 1436.1 22.7 35806  US 15 HAR 1436.1 22.7 35806  US 15 HAR 1436.1 22.7 3696  US 15 HAR 1436.1 22.7 3697  US 15 HAR 1436.1 22.7 3697  US 15 HAR CURRENT ELEMENTS NOT HAINTAINE		546	568	81.2	95.8		USSR	8754	COSMOS 808	1976 024A
USSR 3 FEB 105.0 83.0 1009  USSR 12 FEB 95.8 65.9 589  US 19 FEB 1436.1 5.8 35800 35  US 19 FEB 105.1 69.7 1009  JAPAN 29 FEB 105.1 69.7 1012  USSR 11 MAR 717.6 63.5 40212  USSR 11 MAR 731.0 63.5 40212  USSR 12 MAR 106.8 83.0 1762  USSR 12 MAR 106.8 83.0 1762  USSR 12 MAR 106.8 83.0 1762  US 15 MAR 1436.1 22.7 35788  US 15 MAR 1436.1 22.7 35806 35  US 15 MAR 1436.1 22.7 36957  US 15 MAR 165.6 122.7 36957  US 15 MAR 165.1 ELEMENTS NOT MAINTAINE  US 15 MAR 165.6 CURRENT ELEMENTS NOT MAINTAINE  US 15 MAR CURRENT ELEMENTS NOT MAINTAINE		25422	155	-	120.0	ł	8	13753		
USSR 3 FEB 105.0 83.0 1009 USSR 3 FEB 104.8 83.0 090 USSR 12 FEB 95.8 65.9 589 US 19 FEB 1436.1 5.8 35800 35 UAPAN 29 FEB 105.1 69.7 1009 JAPAN 29 FEB 105.1 69.7 1012 USSR 11 MAR 717.6 63.5 40212 USSR 11 MAR 731.0 63.5 40212 USSR 12 MAR 105.2 82.9 1624 US SR 12 MAR 105.2 82.9 1624 US 15 MAR 1436.1 22.7 35788 US 15 MAR 1436.1 22.7 35788 US 15 MAR 1436.1 515MENT SUBMINIALINE US 15 MAR 165.6 23.7 36967		TATNED	N C	ELENEN.	CURRENT		S	8832		
USSR 3 FEB 105.0 83.0 1009 USSR 3 FEB 104.8 83.0 090 USSR 12 FEB 95.8 65.9 589 US 19 FEB 1436.1 5.8 35800 35 US 19 FEB 105.1 69.7 1012 USSR 11 MAR 717.6 63.3 39519 USSR 11 MAR 731.0 63.5 40212 USSR 12 MAR 105.2 82.9 1624 USSR 12 MAR 105.2 82.9 1624 US 15 MAR 1436.1 22.7 35806 35 US 15 MAR 1436.1 515MENTS NOT MAINTAINE US 15 MAR 1436.1 515MENTS NOT MAINTAINE US 15 MAR 1465.6 23.1 36957 25		TAINED	NOT	ELEMEN	CURRENT	1	5	9752		1
USSR 3 FEB 105.0 83.0 1009 USSR 3 FEB 104.8 83.0 090 USSR 12 FEB 95.8 65.9 589 US 19 FEB 1436.1 5.8 35800 35 US 19 FEB 105.1 69.7 1012 USSR 11 MAR 717.6 63.3 39519 USSR 11 MAR 731.0 63.5 40212 USSR 12 MAR 105.2 82.9 1624 USSR 12 MAR 105.2 82.9 1624 US 15 MAR 1436.1 22.7 35806 35 US 15 MAR 1436.1 515MENTS NOT MAINTAINE US 15 MAR 1436.1 515MENTS NOT MAINTAINE US 15 MAR 1436.1 515MENTS NOT MAINTAINE		35764	3695	131	1465-6	- 1	<u> </u>	8753		1976 0236
USSR 3 FEB 105.0 83.0 1009 USSR 3 FEB 104.8 83.0 090 USSR 12 FEB 95.8 65.9 589 US 19 FEB 1436.1 5.8 35.800 US 19 FEB 214.5 24.4 10719 JAPAN 29 FEB 105.1 69.7 1012 USSR 11 MAR 717.6 63.2 30510 USSR 11 MAR 731.0 63.5 40212 USSR 12 MAR 106.8 83.0 1762 USSR 12 MAR 105.2 82.9 1624 US 15 MAR 1436.1 22.7 35786 US 15 MAR 1436.1 22.7 35806 35		TAINED	NOT	ELEMEN	CURRENT		S	8749	SOLRAD 118	1976 023D
USSR 3 FEB 105.0 83.0 1009 USSR 3 FEB 104.8 83.0 990 USSR 12 FEB 95.8 65.9 589 US 19 FEB 214.5 24.4 10719 JAPAN 29 FEB 105.1 69.7 1012 USSR 11 MAR 717.6 63.2 20519 USSR 12 HAR 106.8 83.0 1762 USSR 12 HAR 105.2 82.9 1624 USSR 15 HAR 1436.1 22.7 35788 35		35766	Ł	21 EMEN	143001		£ 5	8748	2D	
USSR 3 FEB 105.0 83.0 1009 USSR 3 FEB 104.8 83.0 990 USSR 12 FEB 95.8 65.9 589 US 19 FEB 214.5 24.4 10719 JAPAN 29 FEB 105.1 69.7 1012 USSR 11 MAR 717.6 63.2 39519 USSR 12 MAR 106.8 83.0 1762 USSR 12 MAR 105.2 82.9 1624		26783	35788				- 2	8747		_
USSR 3 FEB 105.0 83.0 1009 USSR 3 FEB 104.8 83.0 990 USSR 12 FEB 95.8 65.9 589 US 19 FEB 214.5 24.4 10719 JAPAN 29 FEB 105.1 69.7 1009 JAPAN 29 FEB 105.1 69.7 1012 USSR 11 MAR 717.6 63.3 39510 USSR 11 MAR 731.0 63.5 40212 USSR 12 MAR 106.8 83.0 1762		381	1624	82.9	105.2		USSR	8745	i Ec o	1976 0228
USSR 3 FEB 105.0 83.0 1009 USSR 3 FEB 104.8 83.0 990 USSR 12 FEB 95.8 65.9 589 US 19 FEB 1436.1 5.8 35800 35 US 19 FEB 214.5 24.4 10719 USR 19 FEB 105.1 69.7 1009 JAPAN 29 FEB 105.1 69.7 1012 USSR 11 MAR 717.6 63.5 40717		200	1762	2	106.8	Т	HSSR	8744	CUSMUS 807	- 1
USSR 3 FEB 105.0 83.0 1009  USSR 3 FEB 104.8 83.0 990  USSR 12 FEB 95.8 65.9 589  US 19 FEB 1436.1 5.8 35800 35  US 19 FEB 214.5 24.4 10719  JAPAN 29 FEB 105.1 69.7 1009  JAPAN 29 FEB 105.1 69.7 1012		792	<b>4</b> 0212	63.5	731.0		USSR	9411		
USSR 3 FEB 105.0 83.0 1009  USSR 3 FEB 104.8 83.0 990  USSR 12 FEB 95.8 65.9 589  US 19 FEB 1436.1 5.8 35800 35  US 19 FEB 214.5 24.4 10719  UAPAN 29 FEB 105.1 69.7 1009		886	7101	62 7	717 6	Ł.	9351		EE-T VAIN 10K	
USSR 3 FEB 105.0 83.0 1009  USSR 3 FEB 104.8 83.0 990  USSR 12 FEB 95.8 65.9 589  US 19 FEB 1436.1 5.8 35800 35		987	1000		1051	- 6	JAPAN		i	
USSR 3 FEB 105.0 83.0 1009 USSR 3 FEB 101.8 83.0 990 USSR 12 FEB 95.8 65.9 589 US 19 FEB 1436.1 5.8 35800 35		265	10719	24.4	214.5		LABAN	8702		ı
5 USSR 3 FEB 105.0 83.0 1009 6 USSR 3 FEB 104.8 83.0 990 8 USSR 12 FEB 95.8 65.9 589		25773	35800	50	143641	Į	; ¢	8707	TAKE DAY 1	
5 USSR 3 FEB 105.0 83.0 1009		529	589	65.9	95.8		USSR	8688	COSMOS 803	1976 019A
S 11000 3 EEB 105 0 00		977	1009	83.0	•	1	4888	8646		
					1	,	1550	0645	SMAS	
									- 1	1976 LAUNCHES
SOURCE LAUNCH MINUTES NATION KM. KM. FREQ. (MMZ)		XX.	X	NATION	MINUTES	LAUNCH	SOURCE		NAHE	DESIGNATION
PERIOD INCLE ADDRES DEDICES	TO A MONT TO THE	DEDICEE	ABOCEE	HCTI	PERIOD			- CATALOG		NATIONAL
SOURCE LAUNCH MINUTES NATION KM.	K	P5R1C56 KH:	APOCEE KH.	NATION 83.0	INUTE	CE LAUNCH M R 3 FEB R 10 FEB	SOURCE USSR	1   1   1		OSMOS OSMOS

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	KM.	KH.	FREQ. (MHZ)	MOIES
1976 LAUNCHES	S (CONT.)									
1		8868	Sn	22 MAY	104.7		00.0 EL EMENTS NOT MAINTAINED	941 LAINED		
1976 050A 1976 050B		8872	ns	2 JUN	CURRENT	١.	S NOT MAINTAINED	TAINED 971		
ļ	COSMOS 823	8873	9551	NIII.	104.8	83.0	1003	965		
1976 0518	MARISAT 2	8882	200		1436-1	3.6	35794	35780		
1976 053F		8910	SO:	10 JUN	532.0	25.5	30473	266		
- 1	- 1	8889		21	, , ,	76.0	1543	1479		
		06890	1000 1000 1000	15 JUN	114.9	2	1487	1411		
1976 0540	COSMOS 828	8892	USSR		115.1	74.0	1487	1431		
	- 1	8893	USSR	- 1	115.3	74.0	1488	5001		
		8894	USSR	15 JUN	115.5	74.0	1490	1401		
	- 1	8895	ussa	1	15.8			9235		
	COSMUS 832	8896	USSR	NOT 51	116.0	0.47	1619	1486		
		8897	***	1	CI CMENTO	ğ	ATI ARI F			
		8916	S	26 JUN 25	FLENENTS		AVAILABLE			
1976 0590		8919	Sn	ľ	CURRENT	ELEME	Š	MAINTAINED		
	CUSMUS 836	8923	assn	29 UIN	100.7	78-1	BOB	179		
		8924	USSR	•	100.6	74.1	798	776		
- 1		9572	usse	- 1	7.00		786	757		
		14815	USSR	29 JUN	100.0 FI FME	FI FMFNTS NOT AV	VAIL ABLE			
		9008	Sn	1	ELEMENTS		AVAILABLE	1		
1976 0656	DALADA 1	6006	THOMS	- aut	1436.0	4-0	36033	35538		
1		106	ns	•	436.6	24.4	25115	253 608		
	COSMOS 839	1106	USSR	1		2	200			20*
1976 0678 -		6	USSR	105 a 1	1001	74.0	796	275		
- 1	COSMOS 841	4006 F C O O	HSSR	1	100.5	74.0	194	166		
		9026	USSE	- 1	100.3	74.1	111	767		
1976 0690		13499	USSR	Ť	101.0	74.1	824	98/		
- 1	COSMOS 842	9025	ussa	- 1	100	8300	000	249		
	4	9044	USSR	21 JUL	1636.0	1.6	35788	35781		
	CUMSTAK 4	9329	Sn	]	647.0	22.1	36242	558		
1976 0784	MOI MIYA 1+35	906	assii	- 1	717.5	63.9	39775	566		
Ι.		6926	USSR	-	6.169	64.1	38749	129		
	NOAA 5	7506	Sh	ı			13.14	-		214
- 8110 9161	077EU		SO	29 JUL	) SEE 7	82.9	1010	946		l I
- 1	COSMUS 846	2900	2001	1	104.5	82.9	66	948		
		9270	11S	٠J	CURREN	L	၌	MAINTAINED		
1976 0808		9271	ns		CURRENT			MAINTAINED		
- 1	COSMUS 851	9339	USSR	ı	2 2 2	91.0	583	487		
	•	9390	USSR	27 AUG	72.3 FI FMF	- 1	AVAILABLE			
	DMSP-F1	0190	Y Y	11 SFP	EL EMENTS		AVAILABLE			
0.00		6 1 16	2							

7	3530	. 9 0 0	1436.2	28 JAN	NATO	9785	NATO III-B	005A	1977
974	1016	83.0			USSR	9737 9738	COSMOS 890	004A	1977
883	895	100			USSR	9664		0620	1977
882	368	81.3		6 JAN	USSR	9663		002C	1977
881	896	81.3	102.8	6 JAN	USSR	9661	METEOR 2-2	002A	1977 1977
							IE S	LAUNCHE	1977
948	997	82.9		28 DEC	USSR	9638		1288	1976
945	1013		֓֓֓֓֟֟֓֓֓֓֟֟֓֓֓֓֓֓֓֟֓֓֓֟֓֓֓֓֓֓֓֓֓֓֓֓֓		USSR .	9637	COSMOS 887	1281	1576
750	\$0320 \$000	<b>A 9</b>	7,001	28 DEC	USSR	9647		127E	1976
	24*	7	NOTE		USSR	0636	126BU	126B •	1976
10,5	2077	<b>4</b> 5 C	1110	127 DEC	USSR	9634	COSMOS 886	1264	1376
	200			- 1	9331	9613	C00 C011C03	1228	1976
	23*		NOTE	9 DEC	USSR	2	120BC	1208 -	1976
1462	1684		ľ	ľ	USSR	9598	1	1100	37
100	1677	2	115.3	7 DEC	USSR	9595		1184	1976
1462	1536	74.0		7 DEC	USSR	9593	COSMOS 876	118F	1976
1	1462	*		7-066	- BSSB	9592	•	- 1	137
1462	1514	7	115.7	7 DEC	USSR	1656			1976
1397	1461	74.0		7 DEC	USSR	9589	COSMOS 872	1188	1976
1415	1463	74		-	-USSR	9588	- 1	- 1	1976
821	40283	64.5	٠.	2 DEC	USSR	9579			1976
AINED	NIS NUI MAINTAINED	FLEMENIS	CORRENT	O NOV	1 0 0 0 X	9574	AOCNERA SATO		\$ 7
757	1	82.9	1	•	055R	0166	- 1	i	1076
959	1004	82.9			USSR	9509	CDSMOS 864		1976
357.0	35498	<b>†</b>	14141		USSR	11569		- 1	1376
25422	36168	6.7	1436.6	26 OCT	USSR	9503	EXRAZ		1976
3122	37257	67.3	3	22 OCT	USSR	9495	COSMOS 862	1058	1976
110	1007	*	1	21 OCT	USSR	9494		- 1	1976
908	1012	64.7	3		USSR	9486	CDSMUS 860		1976
849	917	81.5	102.3	12001	1555 2558	10467	20.00	1028	1376
35780	35799		,	- 1	1555	0401	METERD		1976
752	790	74.1	w		USSR	14817	K		1976
786	820	<b>*</b> ;		<u>بل</u> ب	USSA	14816			1976
774	796	7 4	7		USSR	9444	(		1976
,	AVAILABLE	NOT	ELEMENTS	11 SEP	USSR	9416	COSMIS 858	098A	<del>9261</del> 9761
	**************************************	1	ELEMENT'S	1	\$	9518	•	- 1	‡
	AVAILABLE	NOT		1 SEP	S	9484		1160	19/6

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INTER-NATIONAL DESIGNATION

NAME

NUMBER SOURCE LAUNCH MINUTES

NATION

APOCES.

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FREQ. (MHZ)

NOTES

DAJECTS IN DRBIT

INTER-		CATALOG			DEPION	INCI I-	APRCEE	PERIGEE	TRANSMITTING	
DESIGNATION	ON NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	KM.	KM.	FREQ. (MHZ)	NOTES
1977 LAUNCHES	ICHES (CONT.)									
1977 0050		9809	Sn	28 JAN	CURRENT	NT ELEMENTS	TON	MAINTAINED		
١.,		9811	SO	1	CURRENT	ELENE	N S	MAINTAINED		
١.,		9855	Sn	6 FEB	ELEMENTS	P.	AVAILABLE			
1977 010A	MOLNIYA 2-17	9829	USSR	11 FEB	717.8	63.9	38537	1818		
1 .	TANSEI 3	9841	JAPAN	19 FEB	• •	65.8	3804	799		
1		9981	JAPAN		133.5	65.2	3768	785		
		9983	JAPAN	19 FEB	134.3	65.6	3805	808		
1977 0123		13133	JAPAN	1	133.4	65.8	3739	802		
	COSMOS 894	9846	USSR	1	104.7	82.9 83.0	966	968		
1977 014A 1977 014B	KIKU 2	9852	JAPAN		CURRENT	우급	357 S NOT	MAINTAINED		
1977 C15A 1977 015B	COSMOS 895	9853	USSR	1	95.8	81.2	619	523		
1977 018A 1977 021A	MOLNIYA 1-36	9862	INDNSA		717.8	63.9	36609	1781		
	METEOR	9903	USSR	5 APR	102.3	81.3	891	845		
1	١.	9907	USSR	i	103.7	82.9	953	908		
1		9921	USSR	7	723.9	1 .	361	16 4540		
	ESA-GEOS	9931	ESA	20 APR	ELENE	S NOT	11, 481	323		
	MOLNEYA 3-7	9941	USSR	1	717.8	04.0	38529	1824		
t		10001	Sn	1	1436.0	4.9	35790 38398	35779		
	COSMOS 909	10010	USSR		117.0	65.9	2103	990		
1		10013	USSR	l .	117.0 (	65.9	2103	686		
1		10017		l .	EL ENENTS	25	AVAILABLE			
۱ ـ ۱	A COSMOS 911	10019	USSR	ł	104.7	82.9		963		
	A INTELSAT 4A F-4	10024	1150	į .	1436.1	0.6	35793	35781		
1	A DMSP-F2	10033		5 C NON	ELEMENTS ELEMENTS	NOT	AVAILABLE AVAILABLE			
١		10037		ĺ	ELEMENTS	NOT	AVAIL ABLE			
767		9								

		1258	39676	4	6440 6443	400	ļ	900	10201	VOVACED 1	
		1223	39110	64.0	717.4	AG	0 0	USSR	10315	MULNIYA 1-38	1977 082A
		874	2084	27.1	115.5	*	25	45	10295	•	- 1
		35688	35900	2.4	1436.5	AUG	25	LTALY	10294	SIRIO	
		1460	1676	74.0	117.5	1 3		4889	10293		
		1460	1488		•	2	ر د •	922	10292	COSMOS 946	
人 S		1460	1468	74.0	115.2	AUG	24	USSR	10290	COSMOS 944	1977 079F
		1400	1460	*	115.0	\$	ارج 4-	-USSR-	10209	- 1	- 1
JE JE		200	08.51	7	115.9	AUG	24	USSR	10288		
ÞΑ∙ ≀UΩ		1391	1461	74.0	114.4	AUG	24	USSR	98201	COSMUS 941	1977 0796
		1430	1460	Τ.	1148	\$U6		HS SH	10282	- 1	- 1
אר) אר			ORBIT	1	HELIOCENTRIC		20	S	10273		-
4 <i>N</i> ,		TRAJECTORY	ESCAPE TRAJE		SOLAR SYSTEM	AUC.	200	SO	10272	VUTAGER 2	1977 0768
d 19		1010	19186	-			2	455	1570	Į	- 1
K)		35733	35802	6.3	1435.2		23	USSR	10159	RADUGA 3	
		1596	38095	61.8	704.4	٦٢	20	USSR	12996		1977 0686
		2005	26362	4.5	715.6	=	1	#55B	12906		- 1
		3945	36555	67.8	720.8		12 6	USSR	10167		
25*			25#	,	SEE NOTE	ع ال	; <del>-</del>	Sn	10150	605M05 931	1977 0608
		940	1002	83.0	104.5	م ور	1	JAPAN NCCO	24101	1.	005
		949	1005	8340	104.6	- 1		4000	1014	CO31103 720	
		972	1003	82.9	104.9	_		USSR	10138	COCHOC ODA	1977 0628
		538	610	81.2	96.2	٦		10000 10000	10137	-605MB5 926-	
		550	568		95,8	=		9558	10135	697 600000	1977 061R
		770	790	74.1	100.5	آ	-	USSR	14818	CHOC ONE	1977 059D
		774	805	74.1	100.7	١		- 488A XXXX	74802		
		787	807	+	188-8	•		9338	10131	6071103 723	1977 059R
		602	626	97.6	97.0		29	USSR	10114	CDCMOC 022	1977 0578
		601	676	75.8	97.5	Z	2.4	USSP	96001	MC TEOR	- 1
		603	676	75.8	97,5	- [		USSR	66001	176 50000	1977 0558
		971	38270	64.0	695.3	_	24	USSR	10155		1977 0540
		834	17040	2.40	717.0		ا د د	1888 1888 1888	10092	X0L X1 X 1-37	1977 0544
		20110	20253		314		֓֞֜֜֝֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֡֓֓֓֡֓֓֡֓֓֓֓֡֓֓	5 5	10960		
		NTAINED	NTS N	ELEME	CURRENT		16	SS	10409		1977 0534 1977 048F
940	196.961	5376	1755		108,7	1		45	10062		- 1
	126	1878	35808	3.0	1436.0	. 1	16	SO	10061	GDES 2	1977 048A
		4332	36014	67.8	717.6	S JUN	16	USSR	10059	COSMOS 917	1977 047A
										HES (CONT.)	1977 LAUNCHES
(MHZ) NOTES	FREQ. (MHZ)	KH.		NATION	MINUTES	LAUNCH		R SOURCE	NUMBER	NAME	DESIGNATION
LEAUSHITTING	SHYBI			230012				•			

DESIGNATION NAME NUMBER SOURCE LA  1977 LAUNCHES (CGNT.)  1977 084C  1977 084C  1977 084B  1977 084B  1977 084B  1977 084B  1977 084B  1977 091A  1977 102B  1977 102	LAUNCH  5 SEP  13 SEP  14 SEP  15 SEP  20 SEP  20 SEP  20 SEP  20 SEP  22 OCT  22 OCT  23 OCT  28 OCT  38 OCT	HELIDCENTRIC OR 104.7 83.0 104.7 83.0 104.7 83.0 104.1 64.9 96.5 81.2 96.5 81.2 96.6 81.2 96.6 81.2 96.6 81.2 96.6 81.2 96.6 81.2 96.6 81.2 96.6 81.2 96.7 81.2 9	0RBIT 1012 91 1006 91 980 92 980 92 595 55 626 55 AVAILABLE 534 132865 53 132868 534 132868 534 132868 534 132868 534	KM. 959 955	FREG.
LAUNCHES (CUNT.)  084C  084C  084A  087A  087B	managagan nagagaman	ELIDGEN 1-7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	ORBI AVAI AVAI ENTS	959	
084C COSMUS 951 10353 USS 10364 USSR 10368 COSMUS 951 10358 USSR 110368 COSMUS 952 10365 USSR 110368 COSMUS 955 10365 USSR 20091A COSMUS 955 10365 USSR 20091A COSMUS 955 10365 USSR 20092A EKRAN 1056 USSR 20092A EKRAN 1056 USSR 20093A PROGNOZ 6 10422 USSR 20093A PROGNOZ 6 10422 USSR 20093A PROGNOZ 6 10422 USSR 20092A USSR 20094A USSR 20094A USSR 20094A USSR 20094A USSR 20095A USSR 20094A USSR 20095A	Managododyn nydedededmam	ELIOCEN 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	AVAI AVAI I I ENTS	959	
087A COSMUS 951 10352 USSR 1038A COSMUS 952 10362 USSR 10363 USSR 2091A COSMUS 955 10363 USSR 2091A COSMUS 955 10363 USSR 2091A COSMUS 955 10363 USSR 2093A PROGNOZ 6 10370 USSR 2093A PROGNOZ 6 10425 USSR 2005A ISEE 1 1020 ISEE 1 10425 USSR 2005A ISEE 1 1036A USSR 2005A USSR	desposition despositioned	URRENTS	AVAI AVAI ENTS	955	
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091A         COSMOS 955         10362         USSR         2           092A         EKRAN         10365         USSR         2           092A         EKRAN         10365         USSR         2           092A         PROGNOZ         6         10420         USSR         2           102B         ISEE         10425         USSR         2           102D         HOLNIYA         3-8         10425         USSR         2           102D         HOLNIYA         3-8         10425         USSR         2           102D         HOLNIYA         3-8         10425         USSR         2           105A         HOLNIYA         3-8         10425         USSR         2           105B         TRANSAT         10455         USSR         2           106B         TRANSAT         10465         USSR         2           107B         HETEDSAT         10466         USSR         2           108C         COSMOS         963         10459         USSR         2           109B         COSMOS         963         10459         USSR         2           112A         LOSMOS         963	ododna andedededeman	URRENTS	AVAI AVAI ENTS	922	
092A EKRAN 10365 USSR 20926 093A PROGNOZ 6 10370 USSR 2093A PROGNOZ 6 10422 US 2093A 1028 15EE 2 1042 US 2093A 105B 2093A 1042 US 2093A 10485 USSR 2093A 10485 USSR 2094A 105B 2095A 105B 2		LEMENTS 6 6 URRENT 6 6 9	AVAI AVAI 1 ENTS	585 553	
0926         11571         USSR         2           093A         PRUGNOZ 6         10422         USSR         2           102B         1SEE 2         10425         USSR         2           102D         HOLNIYA 3-8         10455         USSR         2           105A         HOLNIYA 3-8         10455         USSR         2           105A         HOLNIYA 3-8         10465         USSR         2           105B         TRANSAT         10465         USSR         2           107B         107B         USSR         2         1056         USSR         2           107B         HETCISAT 1         10469         USSR         2         10469         USSR         2           109B         COSMOS 963         10492         USSR         2         10504         USSR         2           112A         112A         10504         USSR         1         1         1           <		URRENTS	AVAI 1 ENTS	06730	
1028 1SEE 2 10423 ESA 2 1020 1520 105200 10520 1		URRENT	ENTS	2300	32.55
1028   ISEE 2   10423   ESA 2   1050   US 2   10455   US 2   10455   US 2   1056   US 2   US 3   U		URRENT	ENTS	9000	2265.
105A   MOLNIYA 3-8   10455   USSR   2   1064   USSR   2   1094   USSR   2   1094   USSR   2   1096   USSR   2   1050   USSR	1 1 1 1 1			TAINED	
106A         TRANSAT         US         2           106B         10462         US         2           106C         108B         USSR         2           107A         CDSMJS         962         10459         USSR         2           107B         HETEDSAT         1         10490         USSR         2           108A         HETEDSAT         1         10490         USSR         2           108A         CDSMDS         963         1050         USSR         2           109A         CDSMDS         963         10492         USSR         2           109B         1050         US         1050         US         1050           112A         1050         US         1050         US         1050           112F         1059         US         1154         US         1154           112A         1050         US         1154         US         1154           114A         1050         US         1154         US         1154         US         1154           114A         1050         US         1154         US         1154         US         1154         US	1 1 1 1			1083	
1068     10462     US     2       106C     12858     USSR     2       107A     CDSMJS     962     10459     USSR     2       108A     METEDSAT     1     10489     ESA     2       108B     ESA     2     10489     USSR     2       109A     USS     1     2     2       109A     USSR     2     2       109B     1050     USSR     2       112A     1050     US     1       112B     1050     US     1       112C     1054     US     1       112C     1059     US     1       112C     1059     US     1       112C     1059     US     1       112C     1059     US     1       114A     1050     US     1       114A	1 1 1			1060	
1074 CDSMOS 962 10459 USSR 2 1074 LOSMOS 962 10461 USSR 2 1086 HETEDSAT 1 10489 ESA 2 1086 US 10950 US 2 1096 CDSMOS 963 10492 USSR 2 1124 1050 USSR 2 1125 10504 US 1126 10504 US 1127 10504 US 1128 10504 US 1148 10509 US 1148 10509 US 1148 10509 US	1 1 1		1101	1062 1068	
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1086 HEIEUSAI 1 10490 US 2 1086 10950 US 2 1096 1050 US 2 1098 1050 US 2 1128 1050 US 1050 US 1120 1052 US 1052 US 1120 1052 US 1121 1050 US 1122 1054 US 1124 1059 US 1146 US 1154 US 1156 US 1157 US 1158 US	- 1	1435.1 5.2	35802	35731	
108C 10950 US 2 109A COSMOS 963 10491 USSR 2 109B 10502 US 10502 US 112A 10504 US 112C 10528 US 112C 10529 US 112C 1054 US 112C 10594 US 114A 10508 US 1		116.0		- 1	
1096 COSMOS 963 10492 USSR 2 1124 10502 USSR 2 1126 10504 US 1127 10509 US 1148 10509 US		272.6 27.2	14843	250	
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114R 10509 US 1	8 DEC 11 DEC	ELEMENTS NOT	AVAL	TAINED	
OF T	11 DEC		ELEMENTS NOT MAINTAINED	TAINED	
116A COSMUS 967 10513 USSR 1				948	
1051				959	
1160 USSR	13 DEC	6,	1008	969 4	
117A METEOR 2-3 10514 USSR		102.3 R1.2		835	
1178 USSK 1	- 1	3 81		834	
SAKURA 10516 JAPAN	ro i	1455.8 3.3	36179	36164	
1977 1188 1977 1186 US	15 DEC	•		544	
119A COSMOS 968 10520 USSR 1	- 1			711	
1198 10521 USSR 1	16 DEC	100.4 74.0	789	763	
1190 10526 1058 1	م اہ			174	
USSR 1	۰ -			925	

NOTES

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1977 1178 1977 118A 1977 118A 1977 118C 1977 119A 1977 119B

DESIGNATION	NAME	CATAL OC NUMBER	SOURCE	LAUNCH	MINUTES	NATION	APOCES.	PERTOES.	TRANSMITTING FREQ. (MHZ)	NOTES
1977 LAUNCHES	ES (CONT.)									
1977 121B -	1218M	10537	USSR	21 DEC	SEE NOT	,	26#			26#
		10537	USSR		104.7	82.9	997	966		
1977 1238	503nU3 7/2	10541	USSR	27 DEC	103.8	75.8	1159	711		
1978 LAUNCHE	is									
1978 002A	INTELSAT 4A F-3	10557	0511	7 JAN	1436.2	0.0	35792	35783	<b>ОБ</b>	
	COSMOS 975	10561	USSR	10 JAN	96.6	81.2	603	589		
- 1	- E	10582	USSR	NAV OI	115.1	74.0	1462	1453		
1978 005C	COSMOS 978	10585	USSR	NAF OF		740	1462	1307		
1978 0058 1978 005E	COSMOS 980	10586	USSR	NAF 01	115.3	74.0	1461	1435	JAL JAL	
I	- 1	10589	USSR	10 JAN	115.7	74.0	1514	1461	SI 人上	
	6031103 703	10591	USSR	NAV 01	117.7	74.0	1691	1460		
	CUSAUS 985	10600	USSR	NAC 21	104.5	82.9	1009	937		
	THE THE PERSON OF THE PERSON O	10802	USSR	i	732.6	65.0	38954	1870 2128		
	105	10723	SU	26 JAN	682.7	29.7	38356	27628	136,860,2249,800	•
1978 014C	NI ONNO		JAPAN	♦ FEB	134.0	65.3	3947	643		
1978 014E			JAPAN	4 FEB	133.2	64.8	3890	633		
0164	FLTSATCOM 1	10669	SO	9 FEB	1436.2	4.2	35792	35785		
0160		13998	SO	- 1	240.8	26.4	12555	332		
0188	,	10675	JAPAN	1	107.1	69.4	1215	972		
i	COSMOS 990	10676	USSR	` ` 1	100.6	74.0	797	772		
		14803	USSR	- 1	100.2	74.1	774	760		
		10684	SO		718.0	63.3	20369	19994		
1978 021A		10688	SS	25 FEB	CURRENT	ELEMENTS	i i	MAINTAINED		
022A	COSMOS 991	10692	USSR		104.7	83.0	100	4 952		
024A	MDLNIYA 1-39	10696	USSR	O NA C	717.8	66.6	30104	1150		

MATIONAL		CATALOC			DEPIDO	INCI I-	APOCEE	DEPICEE	TRANSMITTING	
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	KM.	KM.	FREQ. (MHZ)	NOTES
1978 LAUNCHES	ES (CONT.)									
1978 026A	LANDSAT 3	10702	Sn	5 MAR	103.1	98.9	918	896		
ľ	0266T	10731	Sn	5 MAR	ᇤ	NOTE 27#	-	140		27*
ļ		10732	USSR	1	104.8	82	1	971		
1	COSHOS 996	10744	USSR	l	104.6	82.9		950		
1	COSMOS 1000	10776	USSR		104.7	82.9	1008	955		
1	INTELSAT 4A F-6	10778	1150	31 MAR	1436.1	0.1	35792	35782		
1		10787	Sn.	١.,	CURRENT	Ι	1	INED		
1978 039A	YURI	10792	JAPAN	7 APR	1433.7	4.5 4.5	37702 337	33775		
1978 039C		10794	Sn	7 APR	274.6	26.9	14974	257		
1978 042A		10853	SA	AA Y	101.0	98.5	746	737		
		10854	3	, MAX	2 88 7	98.5	749	740		
1978 0420		10913	Sn	1 MAY	93.3	98.6	436	431		
1	015-2	10855	ESA	11 MAY	1436.1	2.2	35804	35769		
1978 0446		10857	SS	11 MAY	CURRENT	T ELEMENTS	NOT MAINTAINED	INED		
	COSMOS 1005	10860	assn	- 1	96.5	2.18	3	511		
1978 0458		10861	USSR	12 MAY 13 MAY	96.9	81.2	644 20480	573 19882		
		10894	ns		287.2		15579	200		
1978 051A	PLONEER VENUS ORBITER	10801	3	20 MAY	HENER HENER		LABLE			
		10912	3		MELIDO	HEL IDCENTRIC DRBIT				
1978 053A 1978 0538	CDSMDS 1011	10917	USSR USSR	23 MAY 23 MAY	104.7	82.9	1010	954		
	MOLNIYA 1-40	10925	USSR	2 JUN	717.7	64.1	39415	101		
1978 056A	CUSMUS 1013	10930	USSR	NOS L	116.3	74.0	1552	1476		
1	1	10931	2557	NII '	116.1	74.0	1529	1		
1978 056C	CUSMUS 1015 COSMOS 1016	10933	USSE	NOS 2	115.6	7	1495	1470		
		10934	USSR	NOC ~	115.4	74.0	1489	1457		
1978 056F 1978 056G	COSMUS 1018	10936	USSR	NOS C	115.0	74.0	1486	1421		
- 1	COSMOS 1020	10937	ASSI	NUL Z	114.8	24.0	1483	1405		
		10938	USSR	NUC C	117.9		74.0 1691 14	1477 I NED		
l	i i	10942	Sn	[ _ [	CURRENT		NOT MAINTAINED	VINED	136.660.136.38	**
4948 0624		- F66A7	3	* T	7.00				137.190	

		30004	20278	64.1	717.9	7 OCT	S	11054		19/8 U93A
		1481	1695	74.0	11840	138	USSR	11051		- i
		1475	1507	74.0	115.8	4 OCT	USSR	11050	CDSMUS 1041	
		1477	1525	74.0	116.0	130	USSR	11049	COSMUS 1040	- 1
		1477	1550	74.0	116.3	4 OCT	USSR	11048	COSMOS 1039	1978 091F
		     	1 2 3	*		1	4888	11047	COSMOS 1038	1970 0916
		1459	1480	74.0	115.3	4 OCT	USSR	11046		1978 0910
		1440	1478	74.0	115-1	- A GCT	4888	11045	COSMOS 1036	1970 091C
		1401	1477	74.0		• DCT	USSR	11044		
		1430	1430	7.00		ı	4558	١.	CUSMOS 1034	1
		220	2960	31 3	114 8	) 6 SED	IADAN	11028	SINI NEW	
		•	(BI-		HELIOCENIKIC	1 - VET	UVVK	11025	AUNUXA FO	1970 0004
			ORBIT		HELIDGENTRIG	г	U55R	11020	- 1	- 1
		2948	37601	_	721.7	_	USSR	13959		
		3020	37421	040	71945	6 SEP	USSR -	12919		
		3227	36813	64.0	711.4	6 SEP	USSR	12907		
		3700	26026		223		4550	11076	1	1
		3581	36774	66.2	717.8		USSR	11015	COSMOS 1030	
		1433	38916	64.1	717.7	22 AUG	USSR	11007	MULNITA 1-92	1978 080A
				•	ELEMENT	- 1	US.	13413		- 1
		TAINED	S NOT MAINTAINED	T ELEMENT	CURRENT	_	S	11006		
*	2217.490.	705638	878448	21.7	3755.0	12 AUG	SO	11004	ICE	1978 079A
			118	ATRIC D	HEL TOCENTRIC	1	\$	11003	•	- 1
		TAINED	S NOT MAINTAINED	ELEMENT	CURRENT	_	S	10994		-
		101	ATT ABLE	NOT .	THE STATE OF THE S	1	US.	10993		
		961	987	82.9	104.6	. ]	USSR	10992		-
		36503	12006	B 7 • 0	19/3.3	ים מטר מטר	10000	10001	COSMOS 1027	1
		ALMED	WIND WATER TOP		TATE OF THE PERSON	- 1	8334	11041		
				N .	FLEMENTS	_		18601	ZAUCGA 4	1078 073A
		1656	96,466			- 1	400	1007		
		1384	38973	64.8	717.8	TO OL	USSR	10984	MOLNIYA 1-41	
		128	29277	25.5	- STO- 6	1	\$	10983		- 1
		36016	36064	5-1	1449.1		ESA	10981	ESA GEOS 2	
		575	2626				45	10976	1	- 1
		35783	35792	0.0	1436.2	_ ]	SO	10975	COMSTAR 3	
		602	628		97.0	28 JUN	HESB	10976	בסטונט בעכט	1978 0678
		9186	36663	\$2	720	- 1	USSB	10075		- 1
		3927	36435	67.7			USSR	10970	COSMOS 1024	
		585	638	108-0	96.9	T.	38	14244		1978 0648
		775	779	108.0	100.4	. •	S	10967	SEASAT 1	
		735	760	74.0	99.8	21 JUN	USSR	14804		1978 0630
		1	790	***	1004	1	#55B	10962		- 1
		773	793	74.1	100.5	_	USSR	10961	CDSMOS 1023	
									IES (CONT.)	1978 LAUNCHES
NOTES	FREQ. (MHZ)	X .	X.	NATION	MINUTES	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION
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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	KM.	KM.	FREQ. (MHZ)	NOTES
1978 LAUNCHES	IES (CUNT.)									
1	COSMUS 1043	11055	USSR	10 001	96.2	81.2	585	571		
1	MOLNIYA 3-10	11057	USSR		7.717	64.0	39325	1022		
1978 095E	TIRDS-N	11060	Sn	1	101.8	99.1	853	835		
		11061	SUS	13 001	101-1		814	809	1,	,
	NIMBUS 7	11080	Sti	24 DCI	104.1	99.3	957	962	2211.000	;
1978 U98B	CAMED	11081		- 1	104.0	99.3	970	926		
	COSMOS 1045	11084	USSR	26 OCT	120.3	82.5	1703	1682		
1978 1008 1978 100C	RADIU 2	11086		1	120.3	82.5	1703	1683		
1978 1000		11087	3551		120.2	82.5	907			
		11177	USSR	26 OCT	114.8	74.0	1469 804	1421		
1978 105b		11112	USSR		100.6	74.0	807	765		
		11113	USSR	- 1	100.6	74.0	798	310		
	0.000	11114	USSR	16 VOV	1636.1	1.0	15792	35780		
1978 109A	COSMOS 1051	11128	USSR	i .			1484	1392		
- 1	- 1	11129	1558 1550	2 050	115.0	76.0	1486	1427		
1978 1090	COSMUS 1055	11131	USSB	5 DEC	115.2	24.0	1488	1666		
t		11132	USSR	5 DEC	115.5	74.0	1489	1462		
1978 1096 1978 1096	COSMUS 1057	11134	USSR		115.9	7.0	1513	1479		
	- 1	11135	usse	- 1	116.1	76.0	1535	1479		
		11136	USSR	5 DEC	118.1	74.0	1707 20299	20062		
1978 1128		11142	ns	1	270.6	63.5	14536	426		
- 1		11144	SH SH	14 DEC	1436.3	3.7	35791	35788		
1978 1138		11147	33		1339.2	2.4	35607	32126		
ļ	ANIK 81	11153	CANADA		1436.1	0.6	35798	35776		
1978 117A	COSMOS 1063	11156	USSR	19 DEC	96.5	81.2	635	549		
- 1	HORIZONI 1	11158	9221	- 1	1435.7	12.8	51010	20597		
		11926	USSR	19 DEC	1417.4	12.9	50319 663	20520		
1978 119A 1978 119B	100 T COMADO	11162	USSR	1	93.8	82.9	564	358		
- 1	COSMUS 1066	11165	HSSB GSSB	23 DEC	102-1	81.2	899	804		
1978 1218	7,401 SOMOO	11168	USSE	٠ 4	109.0	83.0	1210	1155		
T .		11170	USSR	26 DEC	108.9	83.0	1195	1157		
1979 LAUNCHES	HES									
A CO 0761	CUSMUS 1072	11238	USSR	16 IAN	104.8	82.9	1013	958		

•	1423			1 1 1		;			
,		28480	64.4	712.3	5 JUN	USSR	11554		
•	1632	38724	64.1	717.8	5 JUN	USSR	11384	MOLNIYA 3-12	1979 C48A
	436	452	55.0	93.5	2 JUN	S	11383		
	530	569	55.0	95.6	'n,	Ę.	11382	UK 0	- [
,	958	566	82.9	104.6	Y AM	USSR	11379		
	054	1005	93 0	104 7	E A	559	11178	- COSMOS - 104	1
1	25770	BVBSE	2 2 2	ומשל 6	A MAY	200	11252		
	555	649	81.3	96.7	14 APR	USSR	11332	DATULC A 5	1979 0328
	574	586	81.2	96.3	14 APR	USSR	11331	CBSMOS 1093	1979 032A
	2072	38991	65.1	732.2	12 APR	USSR	11551		
	1043	0001	83.0	104.6	APX	S S S S	11327	**************************************	1979 0318
i	466	1005		,		1000	11227	2601 5005	
	964	466	82.9	104.7	_	USSR	11321	COCHOC 1000	
i	960	1008	82.9	104-8	7 498	USSR	11320	COSMOS 1091	- 1
X.I Si	964	990	83.0	104.6	21 MAR	USSR	11309		
	330	2000		104.7	1	<del>  858    </del>	11308	C05MD5 1009	
	9648	AVATI ARIF	NOT	EI EMENT	16 MAR	200	11306		
Ac Jug	1463	1545	74.0	116.1	15 MAR	USSR	11303	COSMOS 1088	1979 C24H
	1463	1522	74.0	11548	- 1	U55R	11302	5105	- 1
	1462	1481	74.0	115.4	•	USSR	11301		
	1	1583	40	15,6		US58	1388	1	1979 0246
	1461	1463	74.0	115.2	15 MAR	USSR	11299		1979 0240
<u>ક</u> મકા	1421	1464	74.0	114.7	_	USSR	11297	COSMOS 1082	1979 0248
	1402	1463	74.0	1145	15 ***	USSR	96211	ł	- 1
j	854	934	81.3	102.9	1 MAR	USSR	14632		
	83	888			 	USSR	11290		•
1	797	920	81.3	102.1	HAR	USSR	11289	חבונטא ב ז	
	478	893	74.0	98.5	27 FEB	USSR	11286	METERO 3-A	1979 0208
Ī	483	877	74.0	98.4	- 1	USSR	11285	INTERCOSMOS 19	ł
37+		37*	3	SEE NOT		SO		OLTEF	
) 	35444	35538	5.2	1421.0	21 FE8	USSR	13900	SCH HEND	1979 0150
	35661	35940	512	1436.8		USSR-	11273	EKRAN 3	- 1
1	464	529	55.0	94.6	-	SO	11270	SAGE	
	583 4	589	81.2	96.4	13 FEB	USSR	11268	CUSMUS 1077	1979 012A
ı	\$2.7	649	82.5	97.4	- 1	USSA	11267	- 1	- 1
•	593	622	82.5	96.8		USSR	11266	COSMOS 1076	
	28037	37569	و. و. ر	9 9 16 1	SO JAN	50	19211	AYAME 1	1979 0094
1	573	593	8	90.		\$ \$ \$ \$ \$ \$	7671	55.144	
	581	646	97.7			USSR	11251	METEUR 1-29	
	2801	39076	54.2	732,9	HAP BY	#55P	65511	UDENTIA 2-TT	1979 0348
l									
								IES (CONT.)	1979 LAUNCHES
FREQ.(MHZ) NOTES	KM.	KH.	NATION	MINUTES	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION
TRANSMITTING	DEDICEE	ABOCEE	INC) I	BER100			CATAL DC		- NATIONAL
				7.1	DOOLE 12 THE DISCLE	004			INTER-

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NATIONAL		CATALDG			PERIOD	INCL I-	APOCEE	PERICEE	TRANSMITTING	
DE SI GNATION	NAME	NUMBER	SOURCE	LAUNCH	HINUTES	NATION	KM.	KM.	FREG. (MHZ)	NOTES
1979 LAUNCHES	(CONT.)									
1		11403	Sn		ELEMENTS	TON	AVAILABLE			
1979 0500		11610	¥ <u>¥</u>	NIT O	STREMENTS		AVATI ARI E			
- 1		11534	SII		EL EMENTS		VAILABLE			
051A	BHASKARA	11392	INDIA		92.9	50.7		415		
1979 053C		11436	Sn	10 JUN	ELEMENTS	Ş	AVAILABLE			
N V250 6261	NDAA 6	11416	SH	NIII ZZ	101.0	98.5	418	798	136.770	#
	The second secon								1702.500	
		11419	S	27 JUN	100.5	98.5	785	781		
1979 058A CI	COSMOS 1109	11417	USSR	[ ]	CURRENT	1	ı —	TAINED		
- 1		11555	assi	1	221.6	4.24	37059	3481		
1979 058E 1979 058E		12833	USSR	27 JUN 27 27 JUN	715.2	66.4	36767	3457		
		12909	USSR	•	719.6	68.2	39114	1329		
		5867	100 SK	27 UNN	220 5	45	27050	25.26		
1979 0583 1979 0604 C	COSMOS 1110	13760	USSE	- 1	100.7	24.0	805	781		
9090		11427	USSR		100.6	74.0	801	171		
1979 0630		15784	USSR	28 JUN	100.6	7.0	791	785		
0624	HORI 20NI 2	11440	USSR	- 1	1526.6	4.4	37679	37398		
1979 0620	1116 JUNE	14005	USSR	55 JUL	1474.4	<b>6.8</b>	36544	36522 544		
0678		11458	USSR	<b>1</b> 1	6.96	81.2	619	543		
070A	MOLNIYA 1-44	42411	8550	1	477		39344	1001		
1979 0700 1979 0724 W	WESTAR 3	11556	USSK	31 JUL 10 AUG	1,53.1	6.0	35790	35786		
077A	COSMOS 1124	11509	USSR	28 AUG	717.0	66.5	36915	3401		
		12814	USSR	1	681.9	64.2	36025	2543		
1979 0776 1979 0776		12815	USSF	28 AUG	686.5	63.6	36895	1904		
M220	- 1	12817	assn	1	720.6	63.3	37929	2564		
1979 078A C	CUSMUS 1125	11510	USSK	28 AUG	100.6	74.0	800	774		
ŀ		14805	USSR	_	100.3	74.1	778	769		
1979 084A C	CDSMUS 1130	11538	USSR	1	114.6	74.0	1479	1395		
0848	- 1	11539	8550	d 1	8.41	24.0	1481	1408		
1979 084C C	COSMOS 1132	11540	USSR	25 SEP 25 SEP	114.9	74.0	1480	1423		
3480		11542	USSR	!	115.3	74.0	1481	1453		
1979 0846 C	COSMUS 1135	11544	USSR	25 SEP	115.6	74.0	1494	1471		
C84#	CUSMUS 1137	11545	- 48.5H	25 SEP	115.8	74.0	1512	1471		
1020 050		7 7 2								

DESIGNATION NAME	GATAL BG NUMBER SI	SOURCE	LAUNCH	PERIOD MINUTES	NATION	APOGEE	PERICES	FREQ. (MHZ)
LAUNCHES (CONT.)								
086C	11560	US	1 OCT	ELEME	EMENTS NOT A	AVAILABLE	7.170	1
089A CUSMUS 1140		USSR	11 007	100.5	74.1	795	771	•
0890		USSR		100.3	74.1	780	766	ľ
090A COSMOS 1141		USSR	16 007	104.6	82.9	999	953	•
0908 090C	11586	USSR	16 867	103.6	82.9	950	948	•
0914 MOLNITA 1-45		USSR-	- 1	71.7.7	64.7	\$0186	2247	•
		USSR		732.3	64.9	38612	2457	
_		USSR	٠ ١	96.8	81.2	641	568	,
095B	ĺ	USSR	31 OCT	102.5	81.2	918	846	•
098B	11622	S	ĺ	1436.1	3.0	35791	35782	•
099A COSMOS 1145		USSR	- 1	96.5	81.2	596	585	•
101A RCA SATCOM III	11635	S	- 1	789.0	9.7	35631	8177	4 <b>0</b>
104A ARIANE VI	11645	£84	24 DEC	387.1	17.0	22292	140	່ ຄູ່
1980 LAUNGHES			0 00	***************************************			36164	יסצ כ ער וּ
0024 MOLNIYA 1-46	11662	<del>USSA</del>		71.7.6	*	39437	910	JA.
		USSR	_	732.7	6	40193	893	<b>7</b> Γ!
• •		USSR	14 JAN	104.7	83.0	666	963	Li Li
DOAA FLYSATOOM 3	11719	\$ \$		368.4	25.0	35800	38.780	
005A C05M05 1151		ussa.		97.3	82.5	•	612	
005B	11672 U	USSR	23 JAN	97.4	82.5	651	620	
		USSR		104.7	82.9	1011	954	
0088		USSR		96.9	81.2	655	566	
0118	11705	S	9 FEB	290.5	63.4	15901	402	
012A C0SM8S 1156		SSA		1145	74.0		1396	
COSMOS		USSR		114.8	74.0	1475	1413	
	11694 U	USSR	11 FEB	115.2	74.0	14.77	1448	
•	11695 U	USSR			7.7	1.67	1463	
COSMOS		SSR		115.6		1501		
COSMOS		USSR		115.6	7.0	1501	1470	

INTER-		CATALOG			DERIOD	I NCL 1=	APOCEE	PERIGEE	TRANSMITTING	
DE SIGNATIUN	.UN NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	KM.	KM.	FREQ.(MHZ)	NOTES
1980 LAUN	LAUNCHES (CUNT.)									
1	SMM	11703	Sn	14 FEB	94.5	28.5	494	493	2287.500	**
	RADUGA 6	11708		20 FEB	1436.1		35790	35781		
1980 0160	AYAME 2	11715	JAPAN	22 FEB	1413.2	1.3	38374	32300		
- 1		11720	<b>-</b>	3 MAR	ELEMENTS FI FHENTS	DE LO	AVAIL ABLE			
1980 0196		11731	3	- 1	EL EMENTS	Ħ	VATLABLE			
_	0	11732	Sn:	3 MAR	ELEMENTS		AVAILABLE			
1980 019F		11734	Sa	ł	ELEMENTS	Ş	AVAILABLE			
- 1		11745	SII	- 1	ELEMENTS	NOT	AVAILABLE			
H610 0861	0 7 ( 1 3 CM 3 CD )	11746	US	3 MAR	ELEMENTS 104.8	NOT 82.9	AVAILABLE 1010	956		
1		11736	USSR	17 MAR	104.7	82.9	1004	952		
- 1		12404	USSR	-	100	82.49	1001	07.0		
1980 026A	A COSMOS 1171	11750	USSK	3 APR	104.8	65.8	1001	969		
1		11752	USSR	3 APR	104.8	65.8	1001	969		
1980 028E	CUSAUS 1172	11762	USSR	12 APR	722.2	66.7	37398	3172		
ì	1	11765	USSR	- 1		-199	1560	380		100
1980 0308	3 - 030AX	11782	USSR	18 APR	SEE NO	NOTE 63.9	28*	19888		<b>*</b> 07
1		11791	Sn :	i	255.7	63.3	13609	326		
1980 0381	CUSMUS LIAB	11971	assi Esse	1	103.1	64.8	930	878		
	COSMOS 1129	11796	USSR	- 1	97.0	82.9	955	277		
		11803	USSR	20 MAY	104.8	82.9	1003	969		
1980 044A	A COSMOS 1184	11821	USSR	1 1	96.8	81.2	614	592		
1980 049A	A HORIZONT 4	11841	USSR	14 JUN	1436.1	3.9	35809	35765		
1980 069E	A COSMOS 1188	11862	USSR	14 JUN	717.8	67.5	37576	2780		
- 1		11848	USSR	16 JUN	722.8	97.8	37845	541		
- 1	וור ו רטוי	11849	assn	ı	96.9	475	637	587		
		11852	SN	18 JUN	ELEMENTS	10N	AVAILABLE 38451	1899		
1980 0530		11861	USSR	21 JUN	733.1	65.0	39171	1937		
	A COSMOS 1190	11869	assn		7 001	7.0	708	775		
1980 0568	<b>a</b>	11870	USSK	1 30C	101.3	**	830	803		
1		14809	USSR	10° 1	101.1	74.0	823	800		
1980 057A	A	11888	USSR	2 JUL	722.1	9.99	37430	3135		
ŀ		13999	assn	7	715.4	8 6	1472	1394		
1980 053A 1980 0588	A CUSMUS 1192 8 COSMOS 1193	11876	USSR	- 1	7	7	1473	1141		

DBJECTS IN DRBIT

CANTIDN   NAME   NAMEER SOURCE   LAUNCH   HINDIES   MATION   Kiv.   Kiv.   FREE/ (HMZ)   LAUNCH   LA	NATIONAL		GATALOG			- PC#100		ADDOSS	DEDICES	TRANSMITTING	
CONTINUES (CONT.)   CONT	ESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	X3.	KH.	FREQ. (MHZ)	NOTES
SI	3	- 1									
STITUTE OF THE CONTROL TO STATE OF THE CONTROL TO STAT	0580		11877	USSR	_	•	- 1	1472	1430		
Columbia	058E		11879	USSR	- 1			1473	1466		
Comparison   Com	0586	- 1	11880	USSR	1		740	1490	1469		
1998   1998	0581	1	11883	1888	Г		74.0	1530	1471		
Column	0581	7	11883	USSR	_		74.0	1680	1468		
SI TANDAY 1999 1999 1999 1999 1999 1999 1999 19		*****	14193	USSR	<b>♪</b> 🕈			35463	35198		
1993   005M5   1206   11932   USSR   15 MU	063A	10LNIYA 3-13	11896	HSSR	1	717.8	63.8	8558	2016		
1935	0630		11909	USSR	n co	732.5	63.9	38857	2220		
0738 RETURN CO. 0558 11963 USSR 9 SEP 102.3 81.3 90.5 82.4 1000 1000 1000 1000 1000 1000 1000 10	0698		11933	USSR		97.0	81.2	659	569		
1914 RADUGA 7 12003 USSR 5 DCI 1136.3 3.1 3599 3518 3914 2211,000 2013 RDI 1200 1220 USSR 1 100 1136.3 3.1 3599 3518 3914 2211,000 2013 RDI 1200 1200 1200 RDI 1200 R	073B	E LEGIZ E O	11963	USSR	- 1	• •	81.3	905	826		
OHANG   12003   1200	4 4 4	ME3 4	11964	8	- 1	1436.0	242	35806	35760	<del>2209,086,</del> 2214.000	<b>‡</b>
0930 COSHOS 12217 12032 USSR 24 OCT 710.9 67.1 37723 2588  0930 COSHOS 1220 1200 12005 USSR 100V 19.1 35.0 3578  0931 COSHOS 1222 1205 USSR 100V 19.1 35.0 3578  0932 COSHOS 1223 1205 USSR 100V 19.1 35.0 3578  0933 COSHOS 1224 1205 USSR 100V 19.1 35.0 3578  0934 COSHOS 1225 1205 USSR 100V 19.1 35.0 3578  0935 COSHOS 1225 1205 USSR 100V 19.1 35.0 3578  0936 COSHOS 1225 USSR 100V 19.1 35.0 3578  0937 COSHOS 1225 USSR 100V 19.1 35.0 3578  0938 USSR 100V 19.1 35.0 3578  0939 COSHOS 1225 USSR 100V 19.1 35.0 3578  0939 COSHOS 1225 USSR 100V 19.1 35.0 3578  0930 COSHOS 1225 USSR 100V 19.1 35.0 3578  0931 COSHOS 1225 USSR 100V 19.3 3571  0932 COSHOS 1225 USSR 100V 19.3 3571  0938 COSHOS 1225 USSR 100V 19.3 3571  0939 COSHOS 1225 USSR 100V 19.3 3571  0930 COSHOS 1225 USSR 100V 19.3 3571  0930 COSHOS 1225 USSR 100V 19.3 3571  0931 COSHOS 1225 USSR 100V 19.3 3571  0932 COSHOS 1225 USSR 100V 19.3 3571  0938 COSHOS 1225 USSR 100V 19.3 3571  0939 COSHOS 1225 USSR 100V 19.3 3571  0930 COSHOS 1225 USSR 100 COSHOS 1225	081A	1	12003	USSR	· . [	1436.3	<b>4.1</b>	35799	35781		
ORTAL   FLTSATION 4   12045   USSR   31 DCT   1214   215   217	085A	OSMOS 121	12032	USSR	1	716.9	67.1	37723	2588		
0934 COSHOS 1220 12065 USS 4 NOV 99.1 65.0 1315  921 12065 USS 15 NOV 1436.2 20.0 35789 35787  922	087A	ı	12046	SO	1	1436.0	2.1	35790	35778		
0931 0931 12065 US 15 NOV 1436.2 0.0 35789 35787  9921 NBLNIYA 148 12065 USSR 15 NOV 1436.2 0.0 35789 35787  9922 NBLNIYA 148 12070 USSR 16 NOV 713.3 64.7 38555 2575  9933 COSMOS 1223 12071 USSR 21 NOV 796.9 81.2 658  9934 COSMOS 1223 12078 USSR 27 NOV 723.3 64.0 37536 3089  9935 COSMOS 1224 12085 USSR 5 DEC 104.6 82.9 1014 94.0  9938 INTELSAT 5 F 2 12080 USSR 5 DEC 104.6 82.9 1014 94.0  9938 COSMOS 1226 12091 USSR 10 DEC 104.6 82.9 1014 94.0  9938 COSMOS 1226 12091 USSR 10 DEC 104.6 82.9 1014 94.0  1008 COSMOS 1226 12091 USSR 10 DEC 104.6 82.9 1014 94.0  1008 COSMOS 1226 12091 USSR 10 DEC 104.6 82.9 1014 94.0  1008 COSMOS 1228 12091 USSR 23 DEC 114.5 74.0 1463 1401 1401 1402 1402	089A	5 122	12054	USSR	- 1		i 1	879	555		
0920 0920 12070 USSR 16 NOV 733.6 64.7 38555 2575  093A 605M65 1222 12071 USSR 21 NOV 733.6 64.7 38555 2575  093A 605M65 1222 12086 USSR 21 NOV 723.3 64.0 37536 3089  095E 12076 USSR 21 NOV 723.3 64.0 37536 3089  095E 12076 USSR 21 NOV 723.3 64.0 37536 3089  097A 605M65 1223 12086 USSR 5 DEC 104.6 82.9 1024 94.0 96.9 1014 94.0 96.9 10	W160	1	12065	SO		- 4	. 1	35789	35787		404
0938	0920	OCAL TA	12070	USSR	- 1	733.6	64.7	38555	2575		
095E 1225 12086 USSR 27 NOV 723.3 64.0 37536 3089 077	0938	2221 CONICO	12072	USSR	1	96.9	81.2	658	565		
0977 COSMUS 1225 12087 USSR 5 DEC 101.8 82.9 1024 940  0978	095E	USMUS 1223	12086	USSR	- 1	723.3	64.0	37536	3089		
0988       INTELSAT 5 F-2       12089       1150       6 DEC       246.7       23.7       13017       283         0998       12095       12091       USSR       10 DEC       104.6       82.9       1009       950         10098       12092       USSR       10 DEC       104.6       82.9       998       956         1008       12094       US       13 DEC       ELEMENTS NOT AVAILABLE         1024       CUSHUS 1228       12107       USSR       23 DEC       114.6       74.0       1463       1391         1026       CUSHUS 1230       12107       USSR       23 DEC       114.5       74.0       1463       1404         1026       CUSHUS 1231       12110       USSR       23 DEC       114.5       74.0       1463       1404         1026       CUSHUS 1233       12111       USSR       23 DEC       114.5       74.0       1463       1404         1026       CUSHUS 1233       12111       USSR       23 DEC       114.5       74.0       1463       1404         1027       CUSHUS 1236       12111       USSR       23 DEC       114.6       74.0       1463       1408         1028	297A	OSMOS 1225	12087	USSR REST		104.8	82.9	1024	944		
## 12445 US 6 DEC 246.7 23.7 13017 283  ## 1299	4660	NTELSAT 5 F-2	12089	1150		143641		35827	35745		
12092 USSR 10 DEC 104.6 82.9 998 956 1004 12093 US 13 DEC ELEMENTS NOT AVAILABLE 1008 1228 12107 USSR 23 DEC 114.6 74.0 1462 1412 1028 COSMUS 1229 12108 USSR 23 DEC 114.6 74.0 1462 1412 1020 COSMOS 1231 12110 USSR 23 DEC 114.5 74.0 1463 1404 1020 COSMOS 1231 12111 USSR 23 DEC 114.6 74.0 1463 1404 1020 COSMOS 1232 12111 USSR 23 DEC 114.6 74.0 1463 1416 1020 COSMOS 1233 12111 USSR 23 DEC 114.6 74.0 1463 1416 1020 COSMOS 1236 1231 USSR 23 DEC 114.6 74.0 1463 1416 1020 COSMOS 1236 1231 USSR 23 DEC 114.6 74.0 1463 1416 1020 COSMOS 1236 1231 USSR 23 DEC 114.6 74.0 1463 1416	0988	DEMOS 1334	12445	US		246.7	23.7	13017	283		
1008 1228 1229 12107 US 13 DEC ELEMENTS NUI AVAILABLE 1024 CUSMOS 1228 12107 USSR 23 DEC 114.6 74.0 1463 1391 1026 CUSMOS 1230 12109 USSR 23 DEC 114.5 74.0 1463 1404 1026 CUSMOS 1231 12110 USSR 23 DEC 114.5 74.0 1463 1404 1026 CUSMOS 1233 12111 USSR 23 DEC 114.6 74.0 1463 1404 1026 CUSMOS 1233 12112 USSR 23 DEC 114.6 74.0 1463 1416 1026 CUSMOS 1234 12112 USSR 23 DEC 114.6 74.0 1463 1416 1026 CUSMOS 1237 12112 USSR 23 DEC 114.6 74.0 1463 1416 1027 COSMOS 1238 12112 USSR 23 DEC 114.6 74.0 1463 1416	8660		12092	USSR		104.6	32.9	998	956		
1024 CUSMUS 1228 12107 USSR 23 DEC 114.4 74.0 1463 1028 CUSMUS 1229 12108 USSR 23 DEC 114.6 74.0 1462 1026 CUSMUS 1230 12109 USSR 23 DEC 114.5 74.0 1463 1026 CUSMUS 1231 12110 USSR 23 DEC 114.5 74.0 1463 1026 CUSMUS 1232 12111 USSR 23 DEC 114.6 74.0 1463 1026 CUSMUS 1233 12111 USSR 23 DEC 114.6 74.0 1463 1026 CUSMUS 1234 12113 USSR 23 DEC 114.6 74.0 1463 1026 CUSMUS 1235 12113 USSR 23 DEC 114.6 74.0 1463	8001		12094	S	- 1	ELEMEN		<b>&gt; &gt;</b>			
1026 C0SMUS 1229 12108 USSR 23 DEC 114.6 74.0 1462 1026 C0SMUS 1230 12109 USSR 23 DEC 114.5 74.0 1463 1026 C0SMUS 1231 12111 USSR 23 DEC 114.5 74.0 1463 1026 C0SMUS 1233 12111 USSR 23 DEC 114.6 74.0 1463 1026 C0SMUS 1233 12112 USSR 23 DEC 114.7 74.0 1463 1026 C0SMUS 1235 12113 USSR 23 DEC 114.6 74.0 1463 1026 C0SMUS 1235 12113 USSR 23 DEC 114.6 74.0 1463	1024	- 1	12107	USSR	- !	1144	740	-	1391		
102D COSMOS 1231 12110 USSR 23 DEC 114.5 74.0 1463 102E CUSMUS 1232 12111 USSR 23 DEC 114.6 74.0 1463 102F CUSMUS 1233 12112 USSR 23 DEC 114.7 74.0 1463 102F CUSMUS 1234 12112 USSR 23 DEC 114.6 74.0 1463	950	1	12108	USSR		114.6	74.0	1462	1412		
102F CUSMUS 1233 12112 USSR 23 DEC 114.6 74.0 1463 1026 CUSMUS 1234 12113 USSR 23 DEC 114.6 74.0 1463 1020 CUSMUS 1236 12314 USSR 23 DEC 114.6 74.0 1462	1020		12110	USSR		114.5	74.0	1463	1404		
1026 CUSMUS 1236 12113 USSR 23 DEC 114.6 74.0 1462 1029 COSMUS 1235	102F		12112	USSR	- 1	114.7	74.0	1463	1416		
	1024	OSMOS	12113	1558 1558	330 66	114.6	74.0	1462	1408		

0       0	NAME	ON ONLIN								
}		NOTON	SOURCE	LAUNCH	MINUTES	NATION	км.	KM.	FREQ. (MHZ)	NOTES
1 1 1 1	S (CONT.)									
1 1 1	PROGNOZ 8	12116	USSR	25 DEC	5687.8	65.8	197364	978		
	E K KAN B	12471	USSR			3.8	35616	35364		
1	S									
	MOLNIYA 3-14	12133	USSR	NAL 6	7.7.17	63.9	39588	762		
1981 0038 1981 003A	CDSM05 1238	12138	USSR	1	108.0	83.0	1870	399		
- 1	- 1	12139	ASSU SSS	16 JAN	107.4	83.0	1000	396		
1981 006A	CUSMUS 1241	12149	USSE		104.7	65.8	1010	946		
		12151	USSR	٠.	104.9	65.8	997	981		
1981 008A	COSMOS 1242	12155	LSSR	27 JAN	97.2	81.2	675	571		
- 1	MOLNIYA 1-49	12156	USSR	- 1	217.8	63.5	38809	1546		
		12159	USSR	30 JAN	731.7	63.5	39342	1694		
1981 012A	KIKU 3	12787	JAPAN	11 FEB	588.6	28.5	33498	275		
- 1	COSMOS 1266	12297	assn	- 1	104.8	83.0	1006	959		
	F 4 C F 0 C F 0 C C	12298	USSR	12 FEB	104.7	83.0	1001	955 2881		
1		12311	USSR	ŀ	703.5	65.8	36841	2808		
1981 016F		12984	USSR	19 FEB	708.8	0.49	37458	2451		
		12992	9251	- 1	210.9	65.9	37140	2876		
_	ASTRO 1	12307	JAPAN	21 FEB	96.0	31.3	592 592	543		
L.	COMSTAR 4	12309			1436.1	0	35788	35783		
1981 021A	CDSM0S 1249	12319	USSR	1	103.9	65.0	416	806		
	1	12551	US SR	5 MAR	103.6	45.0	1469	1388		
1981 022A	COSMOS 1250	12320	USSK	O NAR	110.0	2000	14.70	1402		
١.		12322	USSR		114.7	74.0	1470	1416		
1981 0220	COSMOS 1253	12323	USSR	6 MAR	114.9	74.0	1471	1429		
1001 0225	- 1	12325	ASSI	- 1	115.0	24.0	1470	1443		
1		12326	USSR	6 MAR	115.2	74.0	1474	1455		
1981 0223		12328	USSR	i	117.6	74.0	1695	1453		
1981 025A		12339	SP	16 MAR	EL EMENTS		AVAIL ABLE			
-	PADUCA 8	12351	BSSI	- 1	1646.4	9	48604	31012		
		14194	USSR	18 MAR	1474.5 SEF M	3.9	36607	36461		300
	MOLNIYA 3-15	12368	USSR	l		64.9		1107		
1981 0300	COSMOS 1261	12376	USSR	l	716.8	64.8	37292	3014		

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		346	631	89.9	94.4	3 AUG	SO	12626		2070	1981 0
	2214,000	565	23270	89.5	41045	***	9	12024	•	0705	i
		36434	36615	3.5	1474.0		USSR	12850	•	069F	_
		35781	35798	1	143643	30 001	USSR	12618	RABUGA 9		- 1
		618	656	97.7	97.5		USSR	12586		0658	
		67	660	97.7	446	1	<b>₩</b>	12585	METEOR 1-31		1
		35572	35595	ω ( 5	1425.7		USSR	12851	•		
		26764	35013	000	1000	1	4558	12564	TARY 7		1
		1500	10880	65-0	71.0			12563			
		1830	839	99.1	101.6	23 JUN	USS	12560	NOT AT X & 1 - 50	3650	1861
		836	839	99-1	101-6	- 1	45	12559		9598	
:	1702.500	•		,							
	136 770 137 770	836	854	99	101.8	1	- S	12553	NOAA 7		- 1
		2249	38411	67.4	724.0		USSR	12561			
		2365	20047	10.0	3171	100	25.5	12547	COSMOS 1278		1
	***************************************	330	38037		107 3		ECA	14125		0576	
		218	33616	10.6	589.8		ESA	12546		0576	1901
		35548	36478	0.8			1014	6,62	APPLE		- 1
		35788	35790	0.2	1436.2		ESA	12544	METEDSAT 2		
		592	10539	440	733.6	9 dux	USSR	12519		546	1981 6
		552	39792	63.9	717.6	NOF 6	USSR	12512	MOLNIYA 3-16		-
		958	1007	83.0	104.8	JUN	USSR	12504	CUSMUS 1275	46.50	1961 0
		271	12130	24.0	234.0	1	45	12497			- 1
	4444444	35768	35806	0.0	1436.1	23 HAY	0811	12474	INTELSAT 5 F-1	050A I	1981 0
‡	2209.086,	35767	35796	0.1	1435.8	22 MAY	us	12472	GOES 5	049A G	1981 0
		590	\$22	-	87.3		-USSR	1245	İ		
		611	632	81.2		_	USSR	12464	COSMOS 1271		
		<b>#</b> 28	741. 481.E	S NOT	TOZ.4	I STAT	Z Z	49461			1961 0
		827	918		4	- 1		16.75		0436	- 1
		846	888	81.3	102.3	14 HAY	USSR	12456	METEOR 2-7		
		727	793	*	188.5		1858	1434	١		1
		787	808	74.0	100.8	7 HAY	USSR	13498		0410	
		789	803	74.1	100.2	7 MAY	150X	24421	U3003 1207		1981
			WATE ABLE	Ž				1244	:		- 1
			AVAILABLE	N	ELEMENTS		S	12418		038A	
		904	936	04.0	100.0	ı	Un co	12436	1		
		904	1030	70 B	103.6	) APR	ASSII	12409	COSMOS 1266		
		383	1812	83.0	107.2	9 APR	USSR	12389		0338	1981
		392	1874	83.6	10840	9 100	USSR	12388	CUSMUS 1263		- 1
		3038	37318	64.7	717.8		USSR	12894			
		3188	37238	64.5	.719.3	31 MAR	USSR	12892		031E	1981
									(CONT.)	LAUNCHES	1981
NOTES	FREQ. (MHZ)	XX.	KM.	NATION	MINUTES	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION	510
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1981 LAU	LAUNCHES (CONT.)								ı	
	7	14620	SD	3 AUG	406.8	89.8	23097	518 510	ı	
1981 071A	A COSMOS 1285	12627	USSR	4 AUG	726.9	64.8	37854	2950		
-	0	12680	USSR	A AUG	727.7	64.7	37886	2958	•	
1981 071E	ט ע.	13961	USSR		726.8	64.2	38048	2748	1	
۱	FLTSATC	12635	NS.	_	1436.0	4°3	35813	35754		
1981 0764	A COSMOS 1287	12636	325	ALIG ALIG	115.5	4 .	1490	1463	ı	
1981 0745 1981 0745	COSMOS	12638	USSR		119.7	74.0	1463	1423	1	
Ι.	COSMUS	12639	USSR		114.9	74.0	1463	1439		
1	SCMSOO	12660	HSSR -	AUG.	115.3	76.0	1475	1462	1	
1981 074F	F COSMOS 1292	12641	USSK	6 AUG	116.6	0	1463	1406	1	
Ι.	COSMUS	12643	USSR	6 AUG	114.4	74.0	1463	1390		
1981 0741 1981 0754	1	12644	USSR	7 AUG	101.7	81.2	889	792	Ī	
	BULGARIA 1300			1			700	707	1	
1981 0758	89	12646	USSR	7 AUG	101.8	81.2	35810	35767	ı	
I	ļ	0	JAPAN		411.1	28.5	23675	195		
1981 0774	A COSMOS 1295	12681	355	12 AUG	104.5	82.9	1001	646	<b>!</b>	
1961 0778	D CDSMOS 1295	12783	USSE	- 1	104.0	65.1	696	921	1	
Ι.		12808	USSR	24 AUG	103.7	65.1	950	915	1	
1981 0828	A LUSAUS SUB	12786	USSR		97.5	82.5	929	979		
1	A COSMOS 1302	12791	USSR	28 AUG	100.7	79.0	804	116	i	
		12792	USSR	28 AUG	100.6	74.0	798	790		
1981 0846	<b>J</b>	14810	USSR	1 -	101.2	74.0	831	197	I	
	A COSMOS 1304	12803	<b>85511</b>	- I	103.9	82.9	974	906	1	
١.		12804	USSR	4 SEP	103.7	82.9	970	899 856		
1981 C88A	A COSMOS 1305	12827	USSR	11 SEP	262.4	63.1	13562	832	•	
		14131	USSR	- 1	251.6	62.9	12986	199	•	
	<u>u</u>	13404	USSR	14 SEP	97.6	65.0	763	525		
1981 0891	A Crismis 1308	12835	USSR	18 SEP	104.7	82.9	1001	962	ı	
- 1	1000	12836	USSR	- 1	104.7	82.9	993	963	•	
	A OREOL 3	12848	USSR	21 SEP	108.4	82. 82. 82.	1909	399 • 00		
1981 0948	18 COSMOS 1310	12852	USSR	23 SEP	93.1	65.8	431	420		
- 1	588	12855	3	ı	1436.2	0	35789	35788	•	
L .		12879	USSR	30 SEP	115.9	82.6	1501	1488		
-		12887	) 3 3 4	1	94.8	97.7	509	505	2287.494	*
	JA SME	12888		- 1	94.2	97.6	480	478		
1981 1000		12889	O.S	6 OCT	119.1	6.66	2732	550		
						•		0000		

USSR 9 0CT USSR 13 0CT USSR 13 0CT USSR 17 0CT USSR 17 0CT USSR 17 0CT USSR 31 0CT USSR 20 NOV USSR 20 NOV USSR 28 NOV USSR 30 DEC	1437.7 97.5 97.5 97.5 717.8 713.3 HELION ELENEI FLENEI 719.1 714.8 714.8 714.8 714.8 714.8 714.8 714.8 714.8 714.8 714.8 714.8 717.6 698.9 1436.2	1437.7 3.2 35852 97.4 81.2 650 97.5 81.2 672 717.8 64.5 38140 733.3 64.7 38891 HELIOCENTRIC ORBIT ELEMENTS NOT AVAILABLE ELEMENTS NOT AVAILABLE 719.1 63.0 37822 714.9 62.8 37839 719.4 62.9 38860 HELIOCENTRIC ORBIT 717.6 63.9 40013 698.9 64.0 35793 119.4 36.2 0.0 35793
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NOTES

COSMUS 1333   13029   USSR   7 JAN   100.7   74.0   603   783	INTER-		CATALOG			PERTOD	INCLI	APOGEE	PERIGEE	TRANSMITTING
CONTINUE C	DESIGNATION		NUMBER	SOURCE	LAUNCH	MINUTES	NATION	X Y		FREG. (MHZ)
COUNTY   C	1	(CUNT								
COSMUS 1333   13033   15034   USSR   14 JAN   104.9   R2.9   100.2			13029	USSR	1 1	100.7	74.0	803 798	783	
1995   1995		133	13033	USSR		104.9	82.9	1012	966 960	
1,000   1,00	1	SATCOM	13035	Sn	ļ.	1436.2	0.1	35790	35785	
00.06         13105         US         21 JAN         ELEMENTS NOT AVAILABLE           00.06         0.05         13452         USS         21 JAN         91.9         74.0         37.0           00.04         EKRAN B         13056         USSR         5 EB         140.1         23.0         130.2           00.09         EKRAN B         13056         USSR         5 EB         140.2         13.0         23.0         101.4         130.0         130.	1		13103	Sn		ELEME	S S	AVAILABLE		
00004 EKRAN 8 1305 13042 USSR 29 JAN 91.9 74.0 372 300004 EKRAN 8 13056 USSR 5 FEB 1404.0 9 1.0 372 300004 EKRAN 8 13056 USSR 5 FEB 1404.0 9 1.0 374.0 13050 USSR 5 FEB 1404.1 10.0 1014 1012 USSR 19 FEB 104.6 B2.9 1014 1012 USSR 19 FEB 104.6 B2.9 1014 1013 13060 USSR 19 FEB 104.6 B2.9 1014 1013 13060 USSR 19 FEB 104.6 B2.9 1014 1013 13060 USSR 19 FEB 104.6 B2.9 10.0 1014 13060 USSR 19 FEB 104.6 B2.9 10.0 1014 13060 USSR 19 FEB 104.6 B2.9 10.0 1014 13060 USSR 19 FEB 104.6 B2.9 10.0 1014 13060 USSR 19 FEB 104.6 B2.9 10.0 1014 13060 USSR 19 FEB 104.6 B2.9 10.0 1014 13060 USSR 19 FEB 104.6 B2.9 10.0 1014 13060 USSR 19 FEB 104.6 B2.9 10.0 1014 13060 USSR 19 FEB 104.6 B2.9 10.0 1014 13060 USSR 19 FEB 104.6 B2.9 10.0 1014 13060 USSR 19 FEB 104.6 B2.9 10.0 1014 13060 USSR 19 FEB 104.6 B2.9 10.0 1014 13060 USSR 19 FEB 104.6 B2.9 10.0 1014 13060 USSR 19 FEB 104.6 B2.9 10.0 1014 13060 USSR 19 FEB 104.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 10.0 1014 13060 USSR 10 FEB 104.0 10.0 10.0 10.0 10.0 10.0 10.0 10.	Į.		13105	Sn	1	ELEME	Š	AVAILABLE		
USAN   STATES   FEB   1946   1941   1942   1941   1942   1941   1942   1944   1942   1944   1942   1944   1942   1944   1942   1944   1942   1944   1942   1944   1942   1944   1942   1944	1	133	13042	USSR	l	91.9		372	361	
0124 COSMOS 1339 13065 USSR 17 FEB 104.7 82.9 1014 1012	1	EKKAN 8	13059	USSR	1	538.2	48.3	29461	1614	
0112B         COSMUS 1340         13066         USSR         17 FEB         1004         68.9         1004           013B         COSMUS 1340         13068         USSR         19 FEB         91.3         81.2         660           014A         MESTAR 4         13068         USSR         26 FEB         1436.2         20.0         35802         35           015A         MULNIYA 1-53         13075         USSR         26 FEB         717.1         66.0         37602         36           015A         MULNIYA 1-53         13075         USSR         26 FEB         717.1         66.0         37602         35           015A         MUNIYA 1-53         13080         USSR         26 FEB         717.1         66.0         37607         36           015A         LOSHOS 1341         13080         USSR         3 MAR         717.1         66.0         37607         25           015A         LOSHOS 1346         13089         USSR         3 MAR         717.1         66.0         37607         36           015A         LOSHOS 1346         13112         USSR         2 MAR         145.9         2.9         36370         36           025A         MULINI		¬	13065	USSR	•	104.7	82.9	1014	646	
13068   USSR   1964   1965   1966		~	13066	USSR	1	<b>}</b> •	82.9	1004	621	
0.156 HULNIYA 1-53 13070 USSR 26 FEB 710.8 63.7 200.0 201.6 0.156 13080 USSR 26 FEB 710.8 63.7 390.3 201.5 0.156 13080 USSR 26 FEB 710.8 63.8 390.3 1 201.6 0.158 26.1 276.7 2 201.6 201.6 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1	1	13068	USSR	1	1436.2	0.0	35802	35775	
0150 COSMOS 1341 13080 USSR 24 FEB 711.1 66.0 37964 2 016A COSMOS 1341 13080 USSR 3 MAR 711.1 66.0 37964 2 015A INTELSAT 5 F-4 13080 USSR 3 MAR 718.2 66.1 37607 2 019B COSMOS 1340 USSR 15 MAR 1436.1 2.7 35801 35 023A HORIZONI 5 13089 USSR 15 MAR 1436.1 2.7 35803 36370 36 023A HORIZONI 5 13089 USSR 24 MAR 712.3 65.0 40129 023B COSMOS 134A 13112 USSR 24 MAR 104.7 82.9 39346 36 025A METEOR 2 13111 USSR 24 MAR 104.7 82.9 1012 025B COSMOS 1345 13119 USSR 25 MAR 104.7 82.9 1012 026B COSMOS 1345 13119 USSR 27 MAR 94.2 74.0 497 027B USSR 13 MAR 97.4 81.2 670 027B USSR 13 MAR 97.4 81.2 670 027B USSR 13 MAR 97.4 81.2 670 027B USSR 13120 USSR 31 MAR 97.4 62.9 1010 027B USSR 13120 USSR 104.9 82.9 1010 027B USSR 13120 USSR 104.9 82.9 1010 030B USSR 13120 USSR 104.9 82.9 1010 030B USSR 13129 USSR 104.9 82.9 1010 033B USSR 13148 USSR 28 MAR 104.7 82.9 1010 033B USSR 19 MAR 91.6 51.6 353 033B USSR 19 MAR 91.6 51.6 8353 033B USSR 19 MAR 91.6 51.6 803 033B USSR 19 MAR 100.8 74.0 803 033B USSR 19 MAR 100.8 74.0 803 033B USSR 19 MAR 100.8 74.0 803 033B USSR 18 MAR 100.8 74.0 803 033B USSR 19 MAR 100.8 74.0 803 033B USSR 19 MAR 100.8 74.0 803 033B USSR 19 MAR 100.8 74.0 803		-	13070	USSR		717.8	63.7	38440	1916	
0150         INTELSAT 5 F-4         13090         USSR         3 MAR         1436.2         0.0         35801         35           017A         INTELSAT 5 F-4         13083         1150         5 MAR         1436.2         0.0         35801         35           019B         13089         USSR         15 MAR         1436.1         2.7         35803         36           020A         HORLIZONI 5         13089         USSR         15 MAR         1459.9         2.9         36370         36           020A         HORLIXA 3-18         1310         USSR         24 MAR         717.8         64.9         39346         36           023D         USSR         24 MAR         732.3         65.0         40129         36370         36           024B         USSR         24 MAR         704.7         82.9         1012         36370         36           024B         USSR         24 MAR         104.0         82.9         1012         36370         36           025A         HOLLIZONICS 1345         13113         USSR         24 MAR         104.0         82.9         1012           025B         HOLLIZONICS 1345         13114         USSR         31 MAR <td>1</td> <td>1</td> <td>13080</td> <td>USSR</td> <td>1</td> <td>717.1</td> <td>0.99</td> <td>37964</td> <td>2354</td> <td></td>	1	1	13080	USSR	1	717.1	0.99	37964	2354	
1308   U.S.		2	13083	1150	1	1436.2	9	35801	35776	OR (
020A         HORIZONI S         13092         USSR         15 MAR         1436.1         2.9         36370         36           020F         1310         USSR         24 MAR         147.8         64.9         36370         36           023A         MOLNIYA 3-18         1310         USSR         24 MAR         732.3         65.0         40129           023A         COSMOS 1344         1311         USSR         25 MAR         104.0         82.9         1002           025A         COSMOS 1345         13114         USSR         25 MAR         104.0         82.9         1012           025A         COSMOS 1345         13119         USSR         25 MAR         104.0         82.5         958           026B         COSMOS 1346         13120         USSR         31 MAR         94.2         74.1         497           027B         COSMOS 1346         13120         USSR         31 MAR         97.4         81.2         67.0           027B         COSMOS 1349         13124         USSR         7 APR         718.9         62.9         385.8         10.0           029A         COSMOS 1348         13124         USSR         7 APR         104.2 <t< td=""><td>1</td><td>1</td><td>13089</td><td>Sn</td><td>1</td><td>ELENE</td><td></td><td>AVAILABLE</td><td></td><td></td></t<>	1	1	13089	Sn	1	ELENE		AVAILABLE		
023A         MOLNIVA 3-18         13107         USSR         24 MAR         712.8         64.9         39346           023D         023D         13112         USSR         24 MAR         732.3         65.0         40129           024A         COSMOS 1344         13110         USSR         24 MAR         104.7         82.9         10129           025A         METEOR 2         13113         USSR         25 MAR         104.0         82.5         958           025A         13119         USSR         25 MAR         104.0         82.5         958           025A         13119         USSR         31 MAR         94.2         74.1         497           025B         13120         USSR         31 MAR         97.4         81.2         670           027B         13121         USSR         31 MAR         97.4         81.2         670           027B         13121         USSR         3 APR         74.0         82.9         1010           029A         COSMOS 1349         13124         USSR         3 APR         104.3         82.9         1010           029A         COSMOS 1349         13129         USSR         3 APR         104.3<	- 1	-	13092	USSR	1	1459.9	2.9	36370	36133	
024A         COSMOS 1344         13110         USSR         24 MAR         104.7         82.9         1002           025A         METEOR         13113         USSR         25 MAR         104.7         82.9         1012           025A         METEOR         13113         USSR         25 MAR         104.0         82.5         958           025A         13119         USSR         31 MAR         94.2         74.1         497           026B         COSMUS 1346         13129         USSR         31 MAR         97.4         81.2         670           027B         COSMUS 1348         13121         USSR         31 MAR         97.4         81.2         670           027B         COSMUS 1348         13124         USSR         7 APR         718.9         62.9         38518         1           029D         COSMUS 1348         13124         USSR         7 APR         705.4         63.4         37761         1           029D         LOSMUS 1349         13129         USSR         8 APR         104.7         82.9         1002           030A         COSMUS 1349         13129         UMDIA         104.0         82.9         1002	1	MOLNIYA 3-18	13107	USSR	1	732.3	65.0	39346	1007	
024B         NETEOR 2         13111         USSR         24 MAR         104.0         82.9         1012           025A         METEOR 2         13113         USSR         25 MAR         104.0         82.5         958           026A         COSMOS 1345         13119         USSR         31 MAR         94.2         74.1         497           026B         COSMOS 1345         13120         USSR         31 MAR         94.2         74.1         497           027B         13120         USSR         31 MAR         97.4         81.2         670           027B         13121         USSR         31 MAR         97.4         81.2         670           029D         13124         USSR         7 APR         705.4         63.4         37761         1           029D         13129         USSR         7 APR         705.4         63.4         37761         1           030A         COSMOS 1349         13129         USSR         8 APR         104.7         82.9         1002           033A         SALYUT 7         13138         USSR         19 APR         91.6         51.6         353           033B         SALYUT 7         13138	- 1	COSMOS 1344	13110	<b>855</b> 11	- 1	104.8	82.9	1009	998	
UZ5B         COSMOS 1345         13114         USSR         25 MAR         104.0         82.5         958           UZ6A         COSMOS 1345         13119         USSR         31 MAR         94.2         74.1         497           UZ6A         COSMUS 1346         13120         USSR         31 MAR         97.4         81.2         670           UZ7B         13121         USSR         31 MAR         97.4         81.2         670           UZ7B         13124         USSR         7 APR         705.4         63.4         3761         1           UZ5D         USSR         7 APR         705.4         63.4         3761         1           UZ5D         USSR         7 APR         705.4         63.4         3761         1           UZ3D         USSR         8 APR         104.7         82.9         1002         35           UZ3D         USSR         19 APR         104.6         51.6         353         35           UZ3D         USSR         19 APR         91.6         51.6         353         35           UZ3D         USSR         19 APR         100.7         74.0         803           UZ3D         USS		METERN 2	13111	USSR USSR	- 1	104.0	82.5	1012	935	
0.26A         CUSMUS 1345         13119         USSR         31 MAR         94.2         74.1         497           0.27A         CUSMUS 1346         13120         USSR         31 MAR         97.4         81.2         670           0.27A         CUSMUS 1348         13124         USSR         7 APR         705.4         81.2         670           0.29A         CUSMUS 1348         13124         USSR         7 APR         705.4         63.4         37761         1           0.29D         CUSMUS 1349         13127         USSR         8 APR         104.3         82.9         10012           0.30A         CUSMUS 1349         13129         UNDIA         10         APR         104.7         82.9         1002           0.33A         SALYUT 7         13138         USSR         19 APR         91.6         51.6         353           0.33A         SALYUT 7         13148         USSR         28 APR         100.8         74.0         803           0.37B         CUSMUS 1354         13149         USSR         28 APR         100.7         74.0         803           0.37C         13481         USSR         28 APR         100.7         74.0         80	1	i	13114	USSR		104.0	82.5	958 499	934	
0.27A         COSMUS 1346         13120         USSR         31 MAR         97.4         81.2         670           0.27B         13121         USSR         7 APR         775.4         81.2         670           0.29A         13124         USSR         7 APR         705.4         63.4         3761         1           0.29D         13124         USSR         7 APR         705.4         63.4         3761         1           0.30A         CUSMUS 1349         13127         USSR         8 APR         104.7         82.9         1002           0.30B         INSAT-1A         13129         LND1A         10 APR         104.7         82.9         1002         35           0.33B         SALYUT         7         13138         USSR         19 APR         91.6         51.6         353         35           0.37B         USSR         28 APR         100.8         74.0         803           0.37B         13149         USSR         28 APR         100.7         74.0         840           0.37B         13149         USSR         28 APR         100.7         74.0         840	1	CUSKUS 1345	13119	USSR	1	94.2	74.1	497	494	
029A         COSMOS 134B         13124         USSR         7 APR         718.9         62.9         3851B         1           029D         029D         13169         USSR         7 APR         705.4         63.4         37761         1           039A         CUSMOS 1349         13127         USSR         8 APR         104.3         82.9         1010           033A         SALYUT 7         13139         USSR         19 APR         91.6         51.6         353         353           033B         033A         SALYUT 7         13138         USSR         19 APR         91.6         51.6         353         353           033B         033A         SALYUT 7         13148         USSR         19 APR         91.6         51.6         8X*         353           033B         USSR         28 APR         100.8         74.0         803           037C         13149         USSR         28 APR         100.7         74.0         840           037C         14811         USSR         28 APR         101.3         74.0         840	- 1	COSMUS 1346	13120	USSR	1 .	97.6	81.2	670	601	
0290 0290 0304 0304 0308 0304 0308 0306 0308 0308 0308 0308 0308 0308	- 1	CUSMUS 1348	13124	USSR		718.9	62.9	38518	1893	
UBOUR     UBOUR     UBOUR     104.7     82.9     1002       UBOUR     13129     USSR     8 APR     104.0     0.1     35936     35       UBOUR     13138     USSR     19 APR     91.6     51.6     353     35       UBOUR     UBOUR     151.6     363       UBOUR     13148     USSR     28 APR     100.8     74.0     803       UBOUR     13149     USSR     28 APR     100.7     74.0     840       UBOUR     14811     USSR     28 APR     101.3     74.0     840			13169	USSR		705.4	63.4	37761	1979	
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USSR 1 HAY ELERNIS NOT AVAILABLE 1994 USSR 14 HAY 103.7 65.1 94.7 88.7 USSR 17 HAY 103.4 65.1 94.7 88.7 USSR 17 HAY 103.4 65.1 94.7 88.7 USSR 20 HAY 714.5 8.2.4 35846 35715 USSR 20 HAY 714.7 64.2 37958 171.7 USSR 20 HAY 714.7 64.2 37958 171.7 USSR 20 HAY 714.7 64.2 37958 171.7 USSR 20 HAY 714.7 64.2 37958 171.7 USSR 20 HAY 714.7 64.2 37958 171.7 USSR 20 HAY 714.7 64.2 37958 171.7 USSR 20 HAY 103.7 64.9 4040 62.7 USSR 1 JUN 100.7 74.1 80.8 80.3 USSR 1 JUN 103.7 64.9 99.7 USSR 6 JUN 103.7 65.8 1006 98.5 USSR 6 JUN 103.7 65.8 1006 98.5 USSR 6 JUN 103.7 65.8 1006 99.7 USSR 6 JUN 103.7 65.8 1006 99.7 USSR 6 JUN 103.7 65.8 1006 99.7 USSR 6 JUN 103.7 65.8 1006 99.7 USSR 6 JUN 103.7 65.8 1006 99.7 USSR 6 JUN 105.0 65.8 1006 99.7 USSR 6 JUN 105.1 65.8 1006 99.7 USSR 6 JUN 105.3 65.8 1006 99.7 USSR 6 JUN 105.3 65.8 1006 99.7 USSR 6 JUN 105.3 65.8 1006 99.7 USSR 6 JUN 105.3 65.8 1006 99.7 USSR 6 JUN 105.3 65.8 1006 99.7 USSR 6 JUN 105.3 65.8 1006 99.7 USSR 6 JUN 105.3 65.8 1006 99.7 USSR 6 JUN 105.3 65.8 1006 99.7 USSR 7 JUN 105.3 65.8 1006 99.7 USSR 10 JUN 105.3 65.8 1006 99.7 USSR 25 JUN 705.4 63.5 37604 26.9 USSR 25 JUN 705.4 63.5 37604 26.9 USSR 25 JUN 705.4 63.5 37604 26.9 USSR 25 JUN 705.4 63.5 37604 26.9 USSR 25 JUN 105.1 82.9 1021 98.6 USSR 25 JUN 105.1 82.9 1021 98.6 USSR 25 JUN 105.1 82.9 1021 98.6 USSR 25 JUN 105.1 83.0 99.7 94.5		050E 050E 051A 051A 055A 055A 055B 055B 055B 055B 055B 055
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11 HAY ELEMENTS NOT AVAILABLE 14 HAY 103.4 65.1 947 17 HAY 103.4 65.1 947 17 HAY 103.4 65.1 947 17 HAY 1435.8 2.4 35846 35 20 HAY 704.1 64.2 37958 1 28 HAY 732.2 64.9 4040 1 JUN 100.7 74.0 809 1 JUN 101.0 74.0 809 1 JUN 103.9 64.9 977 1 JUN 105.0 65.8 1006 6 JUN 103.7 65.8 1006 6 JUN 103.7 65.8 1006 6 JUN 105.6 65.8 1008 6 JUN 105.6 65.8 1006 6 JUN 105.1 65.8 1006 6 JUN 105.1 65.8 1006 6 JUN 105.1 65.8 1006	13205 13215 13237 13253 13242 14348 13243 13243 13260 13261 13261 14202 16203 16204 16206 16206	050A 050B 051B 051B 051B 052A 052A 052B 055B 055B 055B 055B
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11 HAY ELEMENTS NOT AVAILABLE 14 HAY 103.4 65.1 947 17 HAY 103.4 65.1 947 17 HAY 103.4 65.1 947 17 HAY 1435.8 2.4 35846 35 20 HAY 714.6 63.7 38688 1 20 HAY 714.7 64.2 37958 1 28 HAY 714.7 64.9 39710 28 HAY 712.7 64.9 40440 1 JUN 100.7 74.0 809 1 JUN 100.8 74.0 809 1 JUN 103.9 64.9 977 1 JUN 103.9 64.9 977 6 JUN 105.0 65.8 1006 6 JUN 105.0 65.8 999 6 JUN 103.8 65.8 999 6 JUN 103.7 65.8 991	13205 13215 13237 13237 13242 13242 14398 13243 13243 13259 13250 13261 14202 16203	050E 050E 051B 051B 051C 052A 055A 055A 055B
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11 HAY ELEMENTS NOT AVAILABLE 14 HAY 103.4 65.1 947 17 HAY 103.4 65.1 947 17 HAY 103.4 65.1 947 17 HAY 103.4 65.1 947 17 HAY 1435.8 2.4 35846 3 20 HAY 714.6 63.7 386.88 20 HAY 714.7 64.8 39719 28 HAY 717.7 64.8 39719 28 HAY 717.7 64.8 39719 1 JUN 100.7 74.0 809 1 JUN 100.7 74.1 808 1 JUN 103.9 64.9 977 1 JUN 103.9 64.9 977 1 JUN 103.9 64.9 977 1 JUN 103.0 65.8 1006 6 JUN 105.0 65.8 1095 6 JUN 105.0 65.8 999	13205 13215 13237 13237 13242 13242 14398 13243 13243 13259 13260	050E 050E 051A 051B 051C 052A 055A 055A 0556
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11 HAY ELEMENTS NOT AVAILABLE 14 HAY 103.4 65.1 947 17 HAY 103.4 65.1 947 17 HAY 103.4 65.1 947 17 HAY 103.4 65.1 947 17 HAY 1435.8 2.4 35846 3 20 HAY 714.6 63.7 38688 20 HAY 714.7 64.8 39719 28 HAY 714.7 64.8 39719 28 HAY 712.7 64.8 39719 28 HAY 712.7 64.8 39719 1 JUN 100.7 74.0 808 1 JUN 100.7 74.1 808 1 JUN 103.9 64.9 977 1 JUN 103.9 64.9 977 1 JUN 103.9 64.9 977 1 JUN 103.9 64.9 977	13205 13215 13237 13237 13242 13242 14398 13243 13259	050A 050E 051A 051B 051B 051C 052A 052B
11 HAY ELEMENTS NOT AVAILABLE 14 HAY 103.7 65.1 968 14 HAY 103.4 65.1 947 17 HAY 1435.8 2.4 35846 31 17 HAY 1435.8 2.4 35846 31 20 HAY 714.7 64.2 37958 28 HAY 717.7 64.8 39719 28 HAY 732.2 64.9 40440 1 JUN 100.8 74.0 808 1 JUN 100.8 74.0 808 1 JUN 100.9 74.1 808 1 JUN 103.9 64.9 977	13205 13215 13237 13237 13241 13242 14398 13243	050E 050E 051B 051C 052A
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11 MAY ELEMENTS NOT AVAILABLE 14 MAY 103.7 65.1 968 14 MAY 103.4 65.1 947 17 MAY 1435.8 2.4 35846 31 20 MAY 716.6 63.7 38688 20 MAY 704.1 64.2 37058	13205	
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11 MAY ELEMENTS NOT AVAILABLE 14 MAY 103-7 65-1 968 14 MAY 103-4 65-1 947	91191	3446
11 MAY 103.7 65.1 968	13594	1982 064
11 MAY ELEMENTS NOT AVAILABLE		434
	13172	041C
O TAT 115.9 74.0 1522	13168	0464
	13163	HCPC
6 MAY 115.5 74.0 1493	1362 13165	
6 MAY 115,3 74,0 1482	1361 1364	3040
0 (	1360 13163	0400
74.0 1479	19161	966
	1358	2628
5 HAY 97.7 81.2	13154	1982 0398
	(CONT.)	1982 LAUNCHES
X3.	NAME NUMBER S	DESIGNATION
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DE SIGNATIUN	UN NAME	NUMBER SOUR	CE LAUNCH	H MINUTES	NATION	KM.	χ.	FREQ. (MHZ)	NOTES
1982 LAUN	LAUNCHES (CONT.)								
1	COSMOS 1	13376 USS	SR 21 JUL	114.7	74.0	1473	1408		
1982 0730	COSMOS 1391	S	77	115	74.0	1473	1441		
	COSMOS	SI	17	115	74.0	1472	1458		
	COSMOS	SO	SR 21 JUL		74.0	1481	1468		
1	COSMOS	SA	7;	115.6	76.0	1514	1471		
1982 073H	1 COSMOS 1395	13382 055	8 21 JUL		76.0	1709	1463		
۱	MOLNIYA 1-55	Sn	21		64.9	39334	1017		
- 1		SH	7	٩	64.8	38371	1034		
	CDSMDS 1400	S	SR 5 AUG	97.4	81.2	679	070 598		
1982 0798	ANTE DE 1	13631 CANA	26	1	0	35794	35779		
	MIN NI	211	7	'	63.1	39005	1350		
l		n	27		63.1	39641	1467		
i	ETS 3	13492 JAPA	4		9.88	1229	795		
		JAP	AN 3 SEP	P 105.2	9.4.	1010	993 589		
- 1		4	1		0 44	1167	946		
1982 6870		14569 JAPA	AN 3 36	SEP 100.3	82.6	659	626		
1		3 US	16		82.6	199	625		
- 1	EKRAN 9	ST	4	1	147	35931	35628		
		S	SR 16 SE	SEP 1422.3	2.5	35538	35492 1509		
1982 0954	LUSHUS 1408	13591 USS	22		65.0	38259	1571		
	CDSMDS 1410	S	ı	SEP 115.9	82.6	1699	1490		
		S.	54	SEP 115.8	82.6	1496	1488		
- 1	INTEL SAT SE 5	1	200		24.4	10933	239		
1982 0976	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3500 66561	2		64.8	976	910		
1982 099E		S	7		64.8	746	906		
	COSMOS 1413	SH	7		7.89	1907	9006		
	COSMOS	13606 USS	12 OCT	7 675.7 T 673.5	7.49	19190	19069		
1982 100E	CUSMUS 1415		2		52.2	18956	333		
1982 1001		7	- 1		52.1	18712	370		
		5	12		64.7	19071	19043		
A531 5861	COSMOS 1417	3	4		200	1001	06.2		
_		13618 US	SSR 19 0C	00T 104.6	83.0	35801	35780		
1982 103A	HUKI LUNI &	Š	20		2.0	35808	35703		
1962 1656	PCA SATCOM=V	ָר; 	28	OCI 1436-1	0.0	35789	35784		
† <b>~</b>		٠.	_		26.6	2670	235		
- 1		13636		OCT 1436.1	0.1	35802	35771		
1982 1068	m -	3643		' -	9.0	36228	35845		
7	A COSMOS 1420	)	11		74.0	806	776		
		3649 U	<b>:</b>	NON NON	96	782	748		
		:	_			70			

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			AVAIL ABLE	LON SI	ELEMENTS	nth	50	13874		0087	1900
			AVAIL ABLE		ELEMENTS		S	13849		0086	
			AVAILABLE	1	STEER STANS	<b>₩</b> ;	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	13845		008F	
			AVAII ABI F	TON ST	EL EMENTS		S	13844		3800	
			AVAILABLE	NO	ELEMENTS	9 558	- C	13634		00.80	5861
			AVAIL ABLE	ŧ	T EXEX	,	5	13037		00.36	
			AVAILABLE	3	ELEMENTS		SUS	13791		00 <b>3A</b>	
		172	20394	28-5	356.7		JAPAN		- 1		- 1
		35783	35793	0.0	1436.2	4 FEB	JAPAN		CS-2A		
		855	887	100.1	102.4		S	13778		0048	1983
‡	2253,000	168	908	9941	102.9	26 JAN	5.0	13777	IRAS		- 1
		598	677	81.2	97.5		USSR	13771			
		622	450	81.0	97.4	20 444	USSR	13770	605M05 1437	4600	1983
		1676	1606		1170		115.50	12760			
		1412	1466	74.0	114.7		USSR	13767	COSMOS 1435	0026 0	1983
		1428	1466	74.0	114-8	- 1	USSR	13766	- 1		- 1
۸ Si		1444	1466	74.0	115.0		USSR	13765			
		1461	1466	7	115,2		USSR	13764	COSMOS 1432		1
<b>7\</b> 3:		1464	1481	74.0	115.4		USSR	13763			
		1465	1406	74.0	1150	3,12	16.07	13763			1
		940	984	92.9	104.3	- 1	USSR	13761	CDSM18 1429	0624	1983
		950	992	82.9	104.5	12 JAN	USSR	13758		81C0	
oc		950	1002	82.9	104.6	12 JAN	USSR	13757	COSMOS 1428	0011	1983
K b						1				1983 LAUNCHES	983
		280	416	•	93	29 DEC	USSR H	13751			1
		124	466	65.8	93.5		USSR	13750	COSMOS 1427		
		108	805 807	98.7	100.9	21 DEC	SO	13773		1180	1982
		882	813	984	1010	- 1	\$	13738			- 1
		802	804	98.7	101.0		S	13737		1188	
		809	822		101-2	1	- 65	13736		1184	i
		803	889	81.2	101.8	14 DEC	USSR	13720		1160	
		805	887	81.2	101.9	14 DEC	USSR	13718	METEUR 2-9	116A	1982
324			32*	T	TON 338		USSR		١,	ŀ	- 1
		226	268	62.8	89.5		USSR	13685	COSMOS 1423		
		36669	36656	1:		26 NOV	488	13954	3		1
		35786	35794	1.5	1436.3	26 NOV	USSR	13669	RADUGA 11		
		367	36921	23.9	656.5	•	SS	13653		1100	1982
354		35778	35795		10000	12 NOV	CANADA	13652	‡		
		25.70	36.100			· ·	-10		č	1108	1
									S (CUNT.)	LAUNCHE	1982
NOTES	FREQ. (MHZ)	KH.	:	NATION	MINUTES	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION	DESIG
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DESIGNATION	UN NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	KM.	KM.	FREQ. (MHZ)	NOTES
1983 LAUNCHES	CHES (CONT.)									
1983 011A	ASTRO-8	13829	JAPAN	20 FEB	93.8	31.5	494	456		
1		14566	JAPAN	ı		31.3	458	422		
1		14567	MAPAN		90.5	31-7	30530	296		
1983 015A	MULNIYA 3-20	13875	USSK	11 MAR	731.9	63.3	39183	1867		
_	EKRAN 10	13878		12 MAR	1515.4	2.6	37505	37142		
1983 016E		13885	USSR	1	621.4	46.7	35302	183		
1983 0166	MOI NIVA 1-54	14086	USSR	12 MAR	1424.3	43.5	35616	1643		
- 1	MULINIA I	13897	USSR		732.6		39648	1436		
	ASTRON	13901	USSR	23 MAR	5915.8	79.8	178817	25128		
1983 0216		13917			104.7	82.9	1002	953		
1983 022A	MOAA 8	13923	SH	28 MAR	101.2	98.6	825	802	136.770,137.770,	70.
1983 G22B		13926	SII	28 MAR	101.0	98.7	811	795	10.00	
		14477				98.7	812	797		
1983 0238	CUNCUL LANGE	13950	USSR	30 MAR	104.6	83.0	1005	948		
- 1	MOLNIYA 1-57	13964	USSR	- 1	717.7	63.2	39446	903		
		13967	USSR	2 APR	699.3	63.1	38540	898	2211,000	48
9070-5067-									2232.500	
1983 0266		13970	3	AAV 4	1089		76166	-		
1983 0260	COSMOS 1450	13971	SN	4 APR 6 APR	605.7	25.8 65.9	34357	311		
i		13973	USSR	6 APR	93.7	62.9	466	+++		
1983 028A	KADUGA 12	13980	USSR	8 APR	529.0	48.0	30543	35		
- 1		13983	assn		1639.3	1.2	35899	35799		
1983 030A	RCA SATCOM VI	13984	Sn	11 APR	1436.1	25.4	35795	35778		
1		13990	Sn	11 APR	401.7	24.1	23147	165		
1	2641 6000	13992	USSR	[	100.6	74.1	801	277		
1983 0334	ROHINI 3	14002	INDIA	17 APR	96.5	46.6	796	384		
- 1		14003	INDIA	- 1	95.9	46.6	763	381		
		14004	ALONI	17 APR	93.8	46.6	559	358 444		
1983 C33E		14225	INDIA			46.4	722	387		
1983 034A	COSMOS 1453	14007	USSR	19 APR	93.7	74.0	477	438		
	COSMUS 1455	14032	USSR	- 1	97.6	82.5	659	629		
		14033	USSR	23 APR	97.6	82.5	989	629		
1983 338E	06+1 COMCO	14041	USSR	1	707.3	66.2	38418	1417		
		14297	USSB	ł	719.4	65.8	39180	1256		

1000	NATIONAL DESIGNATION	NAME	CATALOG	SOURCE	ALINCH	PERIO	I NCL I	APOCES	- PERICES	TRANSMITTING	
141		ONT.)							H		
100   100	- 1		14301	USSR	- 1	.717.6	• 1	40007	339		
1005   1005	041A GDE	6	14050	Sn		1436.1	0.0	35896	35779	2214.000,	=
1975   1975			14051	Sn		118.3		2802	\$08	2209-086	
Columbia   1100			14196	S	- 1	864.5	22.8	47317	27405 50		
144.0   144.0   144.0   144.0   145.	0424	35 1459	14057	488	1	104		1015	940		
1000   1000	0428	1661	14059	USSR		104.5	83.0	1008	936		
14076   14076   1507	0448 -	20 101	•	USSR	- 1	- 1	ÿ	*	7		36
1007   1007			14075	HSSR HSSR		4	82.6	1	296		,
1000   1001	0408	547-5-5-6-	97041	USSR		100.7	82.9	1290	291		
1000   1000	0478		14081	SO		362.2	23.1	20743	162		
1971   1972   155A   26 MAY   1973   1729   19972   1790	0488	30 2101	14085	USSR	- 1	104.7	82.9	1000	960		
1951C   19525   US 26 HAY 93.3   72.5   258.7   259.5	051A E	17	14095	ESA	- 1	5443.7	72.9	190472	1790		
051E 1922 US 26 MAY 100.7 72.5 1262 319 055A VENERA 15 14107 USSR 7 JUN HELIOCENTRIC GRB11 056A VENERA 16 14113 US 9 JUN ELEMENTS NOT AVAILABLE 056C 14113 US 9 JUN ELEMENTS NOT AVAILABLE 056C 14114 US 9 JUN ELEMENTS NOT AVAILABLE 056C 14115 US 9 JUN ELEMENTS NOT AVAILABLE 056C 14116 US 9 JUN ELEMENTS NOT AVAILABLE 056C 14116 US 9 JUN ELEMENTS NOT AVAILABLE 056C 14116 US 9 JUN ELEMENTS NOT AVAILABLE 056C 14116 US 9 JUN ELEMENTS NOT AVAILABLE 056C 14116 US 9 JUN ELEMENTS NOT AVAILABLE 056C 14116 US 9 JUN ELEMENTS NOT AVAILABLE 056C 14116 US 9 JUN ELEMENTS NOT AVAILABLE 056C 14116 US 9 JUN ELEMENTS NOT AVAILABLE 056C 14116 US 9 JUN ELEMENTS NOT AVAILABLE 056C 14116 US 9 JUN ELEMENTS NOT AVAILABLE 056C 14116 US 9 JUN ELEMENTS NOT AVAILABLE 056C 14116 US 9 JUN ELEMENTS NOT AVAILABLE 056C 14116 US 9 JUN 1059.6 26.3 35349 4104 056C 14116 US 9 JUN 1059.6 26.3 35349 4104 056C 14116 US 9 JUN 1059.6 26.3 35349 4104 056C 14116 US 9 JUN 1059.6 26.3 35349 4104 056C 14116 US 9 JUN 1059.6 26.3 35349 4104 056C 14116 US 9 JUN 1059.6 26.3 35349 4104 056C 14116 US 9 JUN 1059.6 26.3 35349 4104 056C 14116 US 9 JUN 1059.6 26.3 35349 4104 056C 14116 US 9 JUN 1059.6 26.3 35349 4104 056C 14116 US 9 JUN 1059.6 26.3 35349 4104 056C 14116 US 9 JUN 1059.6 26.3 35349 4104 056C 14116 US 9 JUN 1059.6 26.3 35349 4104 056C 14116 US 9 JUN 1059.6 26.3 35349 4104 056C 14116 US 9 JUN 1059.6 26.3 35349 4104 056C 14116 US 9 JUN 1059.6 26.3 35349 4104 056C 14116 US 9 JUN 1059.6 26.3 35349 4104 056C 14116 US 9 JUN 1059.6 26.3 35349 4104 056C 14116 US 9 JUN 1059.6 26.3 35349 4104 056C 14116 US 9 JUN 1059.6 26.3 35349 4104 056C 15116 US 9 JUN 1059.6 26.3 35349 4104 056C 15116 US 9 JUN 1059.6 26.3 35349 4104 056C 15116 US 9 JUN 1059.6 26.3 35349 4104 056C 15116 US 9 JUN 1059.6 26.3 35349 4104 056C 15116 US 9 JUN 1059.6 26.3 35349 4104 056C 15116 US 9 JUN 1059.6 26.3 35349 4104 056C 15116 US 9 JUN 1059.6 26.3 35349 4104 056C 15116 US 9 JUN 1059.6 26.3 35349 4104 056C 15116 US 9 JUN 1059.6 26.3 35349 4104 056C 15116 US 9 JUN 1059.6 26.3 35349 4104 056C 15116	- 1		14525	Su		93.3	72.5	586	284		30 30
1934   VENERA 15   14101   USSR 2 JUN   HELIOCENTRIC GRBIT   1956   14113   US 9 JUN   ELEMENTS NOT AVAILABLE   14113   US 9 JUN   ELEMENTS NOT AVAILABLE   14114   US 9 JUN   14114   14114   US 9 JUN   14114   14114   US 9 JUN   14114   14114   14114   14114   US 9 JUN   14114   14114   14114   14114   US 9 JUN   14114   1411	051E	- 1	14927	Su	- 1	100.7	72.5	1262	317		1121 19
1968   1977	054A		14107	USSR		HEL 10C	- 1	JRB I T			JAV 900
1950    14144   US   9 JUN   ELEMENTS NOT AVAILABLE   14144   US   9 JUN   ELEMENTS NOT AVAILABLE   14146   US   9 JUN   ELEMENTS NOT AVAILABLE   14180   US   9 JUN   1436-1   0.1   35701   35701   35701   35701   0.			14113	S		ELEMEN	Š	VAILABLE			
1000   10000   10000   10000   10000   10000   10000   10000   10000			14144	S	l	ELEMEN	S	VAILABLE			IVE ICE
14181 US 9 JUN   ELEMENTS NOT AVAILABLE   15782   15782   15791   15782   15791   15792   15			14146	SS	[	ELEMEN	30	•			SI YTI
058B     05CAR 10     14129     FRG     16 JUN     699.6     26.3     35349     4104       058C     14130     £SA     16 JUN     552.9     8.5     31674     197       058B     08CAR 10     14130     £SA     16 JUN     552.9     8.5     31674     197       058B     0ANIK 62     14151     £SA     16 JUN     274.7     8.7     14953     287       059C     PALAPA B1     14134     INDNSA     18 JUN     136.2     0.0     35799     35777       059E     14135     US     18 JUN     662.1     25.6     37246     324       059E     14137     US     20 JUN     662.1     25.6     37246     324       060A     14137     US     20 JUN     68.1     96.4     220     145       061B     14148     USSR     22 JUN     97.6     82.5     663     627       063C     14159     US     27 JUN     100.9     82.0     835     764       063C     14159     US     27 JUN     100.3     82.1     79.0     751       063C     14159     US     27 JUN     100.9     82.0     835     764       063C	056H		14181	SO		ELEMEN	N				
14151 ESA 16 JUN 274-7 8-7 14953 287   14151 ESA 16 JUN 274-7 8-7 14953 287   14151 ESA 16 JUN 274-7 8-7 14953 287   14133 CANADA 18 JUN 1436-2 0.0 35799 35777   14135 US 18 JUN 634-5 23-1 35833 328   14135 US 18 JUN 662-1 25-6 37246 324   14137 US 20 JUN 662-1 25-6 37246 324   14137 US 20 JUN ELEMENTS NOT AVAILABLE 165 663 627   14148 USSR 22 JUN 97-6 82-5 663 627   14155 US 27 JUN 100-9 82-0 835 764   14222 US	058B		14129	TR C		699.6	26.3	35349	4104		
059C PALAPA BI 14134 INNSA 18 JUN 1436.2 0.0 35799 35777 059C PALAPA BI 14135 US 18 JUN 634.5 23.1 35833 328 059E 14136 US 18 JUN 662.1 25.6 37246 324 060A 14137 US 20 JUN 88.1 96.1 220 165 060C 14139 US 20 JUN ELEMENTS NOT AVAILABLE 061A 605M05 1476 14148 USSR 22 JUN 97.7 82.5 663 627 063A 14151 US 27 JUN 100.9 82.0 835 764 063C 14155 US 27 JUN 100.3 82.1 796 751 063C 14222 US 27 JUN 100.3 82.1 796 751	0580			ESA	- 1	274.7	8.7	14953	287		
0590     14135     US     18 JUN     634.5     23.1     35833     328       059E     14137     US     18 JUN     662.1     25.6     37246     324       060A     14137     US     20 JUN     96.1	0590	₽ T		NDNS A		1436.2	000	35798 35799	35777		35*
060A 14137 US 20 JUN 88.4 96.4 220 060C 14137 US 20 JUN 88.4 96.4 220 060C 14139 US 20 JUN ELEMENTS NOT AVAILABLE 061A 605M35 1476 14148 USSR 22 JUN 97.6 82.5 663 061B 14154 US 27 JUN 100.9 82.0 834 063A 14155 US 27 JUN 100.3 82.0 835 063C 14222 US 27 JUN 100.3 82.4 794	- 1		14135	\$ 5	- 1	634.5	23 1	35833	328		
060C 14139 US 20 JUN ELEMENTS NOT AVAILABLE  061A C05M05 1476 14147 USSR 22 JUN 97.7 82.5 663  061B 14148 USSR 22 JUN 97.6 82.5 663  063A 14154 US 27 JUN 100.9 82.0 834  063C 14222 US 27 JUN 100.3 82.4 794	1		14137	45	L	88.4	96.0	220	165		
061B 14148 USR 22 JUN 97.6 82.5 663 063A 14154 US 27 JUN 100.9 82.0 834 063B 14155 US 27 JUN 100.9 82.0 835 063C 14222 US 27 JUN 100.3 82.4 794	0600		14139	SS		ELEMENI	N	_			
063A 14154 US 27 JUN 100.9 82.0 835 0636 14252 US 27 JUN 100.9 82.4 794	0618	00110	14148	USSR	- 1	97.6	82.5	663	627		
0636 16222 US 27 UUN 100.3 82.4 794	- 1		14154	US &	1	100.9	82.0	834	765		
	- 1		14222	\$ 65	- 1	100-3	82	794	751		

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	NAME NO.	NOMBER	SOURCE	LAUNCH	MINUTES	NATION	ĸ.	χ.	FREQ. (MHZ)	NOTES
1983 LAUN	LAUNCHES (CONT.)									
i	C THOOLSONE 2	14168	Sn	28 JUN	553.9	23.2	31687	236		
1983 0660		14166	11558	1	627.3	46.6	35668	122	•	
J		14167	USSR		445.5	6.98	25630	255		
	6	15141	USSR		1475.2		36586	36509		
1983 067A	COSMOS 1673	14163	USSR 11888	1111	114.4	TALEMENTS	1461	1392		
	COSMOS	14172	USSE		116.6	76.0	1661	1409		
	COSMOS	14173		ľ	114.8	74.0	1461	1426		
1983 0690	COSMOS 1	14174	USSR	6 JUL	114.9	74.0	1461	1443		
	CDSMOS	14175	USSR	6 JUL	115.1	74.0	1462	1459		
1983 069E	COSMUS 1	14176	USSR	4 JUL 4	115.3	74.0	1479	1461		
	COSMOS	14177	USSR	6 JUL	115.5	74.0	1497	1461		
- 1	COSMOS 1480	14178			115.8	78.0	1517	1981		
		14179	USSR	•	117.4	74.0	1671	1460		
- 1	A CUSMOS 1481	14182	USSR	1	707.3	65.3	18199	1635		
		14191	USSR	8 JUL	708.0	65.3	38103	1765		
		75161	XX	d,	80808	100	38780	0000		
1983 0728		14189	S =	14 JUL	371.8	K*79	20402	19889		
	ART AVIA	16199	95511	10	716.7	63.5	40091	207		
	HOLINE L	14206	USSR	۰,	683.7	63.6	38495	162		
	COSMOS 1484	14207		•	97.1	97.9	655	587		
્ત		14208	USSR	i	97.4	97.9	662	909		
		14209	USSR	_	97.1	97.9	657	584		
1983 0250		14229	assn	24 1111	97.7	97.B	677	616		
1983 075E		14631	USSR	•	97.1	97.8	641	598		
- 1		14928	USSR	- 1	97.4	97.9	199	909		
	A TELSTAR 3A	14234	Sn		1436.1	01	35792	35782		
-1		14236	2	1	355.0	1		177 THE P. T. L. C.		
1983 U/8A		16231	s =	31 JUL	CURRENI	T CLEMENTS		MAINIAINED		
1	COSMOC 1486	14240			100.7		8	780		
	CO3MO3 440	14241	USSR	3.416	100.6	74.1	800	774		
۳.		14344	USSR		101.2	74.1	833	197		
		14813	USSR	3 AUG	101.3	76.0	838	803		
		15756	USSR		100.6	74.1	197	173		
	CS-28	14248	MAGAL	- 1	1436.2	1.0	35788	35786		
		14287			529.7	28.5	30403	214		
1983 C84A	COSM35 1490	14258	USSR	- 1	675.7	64.8	19172	19086		
1983 0848	COSMOS	14259	USSR	-	9.419	64.8	19123	19078		
1983 084C	COSMOS 1492	14260	USSR	10 AUG	676.8	54.7	19160	19153		
		14264	S		676.3	8 . 6	19155	19131		
1983 C861		14277			338.8	25.0	47051	707		
		14278	USSR		337.7	52.1	19012	356		
1		14325	•	, J	No 18	16.9	380	2555		
	A RADUGA 13	14307	USSR		1436.1	8.0	32068	35///		
1			X 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1	2 3 1 7	6.7.3	25057	142		
1983 088E		14311	USSK	25 AUG	612.4	7.14	10000	741		

186	18247	46.7	123.0	1				1
35781	35798	0.5	1436.3				HORIZONT 8	1983 118A
1476	1519	73.6	115.9	1				
1477	1522	73.6	116.0				COSMOS 1510	
1182	38252	1	1 200	1				[
1231	39128	62.9	717.9		<b>20</b>		MULNIYA 1-59	
803	920	200.7		1		14610		1
808	820	98.7	101-1			14609		
808	917	90.7	101.1	NO.	100	14554		1007 1130
				- 1		14500		111 E801
381	1930	82.9	108.5		<b>2</b> 0	•		
397	1944	82,9	108,8	- 1	11 SSR 11	14483		1 1 A
103	421	65.1	92.8			-	COSMOS 1507	
742	886	81.2	107.7	1		14454		1983 1096
738	898	81.2	101.3			_		1983 1098
146	885	=	1		#858	1452	METEOR 2-10	1983 1894
947	1000	82.9	104.6					
949	1010	82.9	104	1	USSR 26		COSMOS 1506	1
209	252	72.8	89.1					
140	12060	P (	250 2	1000	150		-	
26742	26792	0.0	8 95 91	- 1	Î	Ì	INTELSAT 5 E-7	
774	907	34.0	100.0	12 001	1000		00100	1
120	449	82.9	100 8	30 SEP		18801	COSMOS 1503	VEUL EBEL
424	151	82.9	93.3			-		
405	<b>A29</b>	82.9	92.9	- 1		I		- 1
<b>\$</b> 0 <b>8</b>	432	82.9	93.0			•		
63	125	230	25	1		l		1383 1618
396	420	82.9	92.7					
	A 80	82.6	91.0	ŀ				1
449	486	82.9	94.0			_	COSMOS 1501	
25494	25662		1425.0	ı				
826	14027	45.4	269.0			_		
35779	35793	0.8	1936.1	30 SEP	UCCO 3	14377	CAXAN 11	1993 1993 AOO1 6061
627	62		9746	- 1				- 1
627	663	82.5	97.6			14372	CUSMUS 1500	
181	21937	23.7		1		14369		1983 0986
35787	35793	0.0	1436.2			14365	GALAXY 2	
227	250	82.3	80 5	ł		14375		
293	3762	, ,	127.8	8 SEP	S	14329		-
25791	33*	NUTE	SEE P	9 SED	LIS U	90591	RCA SATCOM VII	1983 0944 - 716 -
1389	39629	63.0	4 ۱	- 1		16919	>>117	- 1
1319	39044		718.0			14313	MOLNIYA 3-21	
255	196361	1	6440	256	4	14524		1983 0896
0000	25454	7.0	1436.2	SI AUG	ENOTA :	I OTCAT	INVAL 18	1702 0070

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	KM.	KM.	FREQ. (MHZ)
1983 LAUNCHES	IES (CONT.)								
1983 120A	COSMOS 1513	14546	USSR	8 DEC	104.8	82.9	1015	957	
1	COSMOS 1515	14551	USSR		97.6	82.5	099	630	
ł	MOLNIYA 3-22	14570	USSR	1	717.6	64.3	39933	411	
	COSMOS 1518	14587	USSR	28 DEC	714.0	65.8	38982	1183	
1983 127A	1	14590	USSR		675.7	65.1	19152	19106	
1	COSMOS 1521	14592	USSR	1	673.4	65.1	19139	19002	
1		14607	USSR	1	338.6	52.1	19136	294	
1984 LAUNCHES	5 3			4 i					
		1441	9001	2	115.4	74.0	1491	1659	
1984 0018	COSMOS 1522	14612	USSR		114.4	74.0	1459	1395	
- 1		14613	2551	NAL	7 411		1459	1426	
1984 001D	COSMOS 1525	14614	USSK	S JAN	114.9	7	1459	1441	
ì	i	14616	USSR	SUAN	115.1	74.0	1459	1457	
1984 0016 1984 001H	COSMOS 1528	14618	USSR	1	115.6	74.0	1510	1459	
1984 0014	۱	14619		d,	47.5	4 5	080	22.5	
1984 003A	COSMOS 1531	14624	USSR USSR	11 JAN	105.0	82.9 82.9	1003	696	
١.	BS-2A	14659	JAPAN	23 JAN	1436.2	0.0	35795	35781 196	
1		14713	USSR	1	88.9	70.4	222	219	
1984 007A	COSMOS 1534	14669	USSR	26 JAN	94.0	65.8	504	141	
	PRC 14	14670	PRC	NAL 15	163.4	T FI FMENTS	NTS NOT MAINTAINED	TAINED	
1984 009A		14677	S	31 JAN	EL EMEN	·			
1	COSMUS 1535	14679	USSR	2 FEB	104.8	83.0	1015	951	
1984 011E		14693	Sn	1 -	•	28.2	1153	279	
- 1		14694	SH	A FEB	98.5	27.5	1068	304	
		14970	SII	- 1	93.8	27.9	628	293	
1984 012A		14690	S :		ELEMENTS	TON STA	AVAILABLE Avai: Ari F		
1		14728	Sn	1 -	EL EMENTS		AVAILABLE AVAILABLE		
1984 0120 1984 012F		14795	Sn	ļ	ELEMENTS ELEMENTS	N N	AVAILABLE AVAILABLE		
1984 0124 1984 012K		15348	Sn	ı	ELEMENTS	NOT	AVAILABLE		
		15349	Su	5 558	ELEMENTS	IS NOT	AVAILABLE		

	36195	36315		1460-1	22 APR	USSR 22	14943		0410	1984
	35782	35793	0.1	1436.2	_		14940	HORIZONT 9	041A	
	294	816		90.6	22 <b>★</b> ₽₽	7	14953		000	1984
			S NOT	ELEMENTS			14931		037B	
	4.14	11666	20.5	OZY.Y JU.J	O ATR	PRC 1	14900		0338	1984
	35782	35800		143643	- 1		14899	#C 15	400A	- 1
	349	370	74.1	91.7	_	USSR 1	14937		034M	
	305	916	23.6	90.7		USSR	14936		7460	1584
	474	477	28.5	94.1	6 APR	S	14898	LOEF	0346	•
	1304	39022	00.0	706 6	2 2 2 2	5007	1004	COUNTS FOR I		
	1350	30033		710 3	- 1	9337	14884		926	
	35959	36094	0.3	1448.4	_		14951		031F	
	173	14156	454	618.1	- 1		14888		3160	- 1
	345	32280	5.3	556.9			14887		0310	•
-	26777	26795		1300	1		14847	COSMOS 1546		1
•	433	40578	4	730-9	I O MAR	HSSR 1	05841	HOCKLEY TOO	0290	
	35377	35554	1.7	1419.8			15139	MOL MI WA TO GO	0287	1984
•	100	98186		-	- 1	-	14829		200	- 1
	533	35291	47.0	627.9			14828		0880	
-	35766	36796	+	1135.8	<b>* * * * *</b>	USSR 1	14821	TRAN 12	\$959¥	100
	629	659	82.5	97.6	-		14820		027B	
-	986	07.685	63.5	709.7	A A A	USSR I	14819	C05M05-1544	0274	1904
٠	22.	20020			- 1	1000	10706	CU3/U3 1311	200	
	298	31648	11.0	554.3	5 HAR	ESA	14787		0238	
-	26763	91036	6			1188	14786	INTELSAT 5 F-8		100
	35813	35985	1.4	1441.9	2 MAR	USSR	14948		022F	
-	222	25004		636.7	MAR	HSSB.	14789		3550	
•	141	28282	67.7	619.6	2 MAR	USSR	14788		022D	
	483	35803	100.1	96.3	1 MAR	US	14782	COSMOS 1840	021C	1984
	624	693		984	***	*	14781	UBSAT 2	815	150
2287,500	699	700	98-2	98.8	***	US	14780	LANUSAL 5	4 1 20	1984
	785	805	74.1	100.8	21 FE8	ㅉ	15785		0190	1984
•	767	910	1	100-6	21 FEB		14760		9610	1984
•	775	807	74.0	100.7	21 FFB		14759	COSMOS 1538	W610	1984
	207	23651	40.9	4.014	15 FEB	HEER	14742		0166	1094
•	35780	35788		1436.0	ſ		14725	**************************************	100	
	347	774	74.6	95.9			14724		015C	1984
•	349	801	74.0	96.2	<b>h</b> :				6158	1584
•	196	718	74.6	95.2	14 FFB			DHZORA	015A	1984
'	629	662	82.5	97.6	8 FE8	USSR	14699	COSMOS 1536	013A	1984
								ES (CONT.)	LAUNCHES	1984
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CANINCHES (CONT.)  LAUNCHES (C	DESIGNATI		NUMBER	SOURCE	LAUNCH	MINUTES	NATION	Æ.	×.	FREG. (MHZ)	NOTES
0444 COSHOS 1550 1596 1558 11 NAY 104.9 69.0 1010 0444 COSHOS 1559 14972 1558 11 NAY 104.7 62.0 1017 0446 COSHOS 1554 14977 1558 17 NAY 104.7 62.0 1017 0447 COSHOS 1554 14977 1558 12 NAY 675.1 65.0 19176 0477 COSHOS 1554 14977 1558 12 NAY 675.2 65.0 19176 0477 COSHOS 1554 14977 1558 12 NAY 675.2 65.0 19176 0477 COSHOS 1559 14979 1558 12 NAY 675.2 65.0 19175 0477 COSHOS 1559 14979 1558 12 NAY 675.2 65.0 19175 0478 10.0010 1558 12 NAY 675.2 65.0 19175 0447 COSHOS 1559 14979 1558 12 NAY 115.7 74.0 1497 052.0 COSHOS 1559 14998 1558 28 NAY 115.7 74.0 1497 052.0 COSHOS 1559 1500 1558 28 NAY 115.7 74.0 1497 052.0 COSHOS 1564 1500 1558 28 NAY 115.7 74.0 1497 052.0 COSHOS 1564 1500 1558 28 NAY 115.7 74.0 1497 052.0 COSHOS 1564 1500 1558 28 NAY 115.7 74.0 1497 052.0 COSHOS 1564 1500 1558 28 NAY 115.7 74.0 1497 052.0 COSHOS 1564 1500 1558 28 NAY 115.7 74.0 1497 052.0 COSHOS 1564 1500 1558 28 NAY 115.7 74.0 1497 052.0 COSHOS 1564 1500 1558 28 NAY 115.7 74.0 1497 052.0 COSHOS 1564 1500 1558 28 NAY 115.7 74.0 1497 052.0 COSHOS 1564 1500 1558 28 NAY 115.7 74.0 1497 052.0 COSHOS 1564 1500 1558 28 NAY 115.7 74.0 1497 052.0 COSHOS 1564 1500 1558 28 NAY 115.7 74.0 1497 052.0 COSHOS 1564 1500 1558 28 NAY 115.7 74.0 1497 052.0 COSHOS 1564 1500 1558 28 NAY 115.7 74.0 1497 052.0 COSHOS 1564 1500 1558 28 NAY 115.7 74.0 1497 052.0 COSHOS 1564 1500 1558 28 NAY 115.7 74.0 1497 052.0 COSHOS 1564 1500 1558 28 NAY 115.7 74.0 1497 052.0 COSHOS 1564 1500 1500 1500 1500 1500 1500 1500 150	1	1						:			
CONTROL   1553   14973   USSR   17 MAY   104.7   R2.9   998   USSR   CONTROL   USSR   USSR   CONTROL   USSR	1	COSMOS	14965		١.		83.0 83.0	1010	970 972		
CARADA         COSANIS         1554         1977         USSR         19 HAY         675.7         65.0         19172         115           CARAD         COSANIS         1555         1497A         USSR         19 HAY         675.7         65.0         19172         115           CARAD         COSANIS         1555         1497A         USSR         19 HAY         675.7         65.0         19172         115           CARAD         COSANIS         1555         1497B         USSR         19 HAY         675.0         19173         131           CARAD         SPACENET         1         14989         USSR         23 HAY         185.1         74.0         1508	1	COSMOS	14973		i	104.7	82.9	1007	957		
October   Octo	- 1	SUMSOJ	14974			675.7	65.0	19172	19086	•	
04476 CISHIGS 1556 14979 USSR 19 MAY 676,3 65,0 19175 116,0 19175 104,7		COSMOS	14978	USSR	- 1	675.7	65.0	19154	19104	1	
04.7C         15053         USSR         19 MAY         340,2         5,21         19123           049.7L         049.7L         15054         USSR         19 MAY         140.6         51.0         19123           049.4L         049.4L         115.7         74.0         15052         19 MAY         115.7         74.0         15052         19 MAY         115.7         74.0         15052<		COSMOS	14979			676.3	65.0	19158	.19130 19074		
0494   SPACENET   15054   USS   19 MAY   1436.1   0.0   35793   39	1		15053	USSR	l .	340.2	52.1	19123	405		
0499         SPACENET         1 1998         USS         23 HAY         115-7         71-0         1597-2           0528         CUSHOS         1849         USSR         28 HAY         115-7         71-0         1408           0526         CUSHOS         1560         USSR         28 HAY         115-7         71-0         1475           0526         CUSHOS         1560         USSR         28 HAY         115-7         71-0         1475           0526         CUSHOS         1560         USSR         28 HAY         115-7         71-0         1475           0526         CUSHOS         1564         1500         USSR         28 HAY         116-7         71-0         1475           0527         CUSHOS         1564         1500         USSR         28 HAY         114-5         71-0         1475           0528         CUSHOS         1564         USSR         28 HAY         114-5         71-0         1478           0529         CUSHOS         1565         1500         USSR         28 HAY         114-5         71-0         1478           0550         CUSHOS         1560         USSR         28 HAY         114-5         71-0	- !		15054	USSR.	1	350.6	200	36703	35780	ſ	
Colored 1559   1999   USSR   28 HAY   115.7   74.0   1508   1608   1605   1609   1658   28 HAY   115.4   74.0   1499   1655   1609   1655   28 HAY   115.4   74.0   1499   1655   1600   1055   28 HAY   115.5   74.0   1475   1		SPACENET	14985	S O S		1436.1	7.1	15952	130	1	
Control   Cont	1	COSMUS	14998	USSR		115.7	74.0	1508	1468		
C52C         CDSMUS         1500         USSR         28 MAY         115.4         74.0         1475           U52C         CUSMUS         15001         USSR         28 MAY         115.0         74.0         1475           U52C         CUSMUS         15002         USSR         28 MAY         116.7         74.0         1475           U52C         CUSMUS         1504         USSR         28 MAY         116.7         74.0         1474           U52L         CUSMUS         1566         15004         USSR         28 MAY         116.7         74.0         1474           U52L         CUSMUS         1566         15009         USSR         28 MAY         117.7         74.0         1478           U52L         CUSMUS         1567         USSR         1 JUN         91.0         72.8         33.9           U55A         CUSMUS         1567         USSR         1 JUN         100.7         74.1         808           U55A         CUSMUS         1503         USSR         8 JUN         100.7         74.1         803           U55A         CUSMUS         1503         USSR         8 JUN         100.7         74.1         803	- 1	COSMOS	16999	MSSN	7	115.5	78.0	1690	898		
USEZ 01520         COSMUS 1503         15002 15003         USER 15003         28 MAY 114.7         74.0 1474         1474 1474           0524         COSMUS 15004         15004 15005         USER 15006         28 MAY 114.7         114.7 14.0         1475 14.0         1474 1474           0524         COSMUS 15006         USER 15006         1888 15009         28 MAY 111.7         114.7 14.0         1478 14.0		COSMOS	15000	USSR		115.4	74.0	1483	1460		
USAN   USAN	1	SONSOS	15002	325	1	115.0	74.0	1475	1436	1	
052G         CUSHUS         1565         15004         USSR         28 MAY         114.7         74.0         1474           052J         CUSHUS         1566         USSR         28 MAY         117.7         74.0         1678           052J         CUSHUS         1566         USSR         28 MAY         117.7         74.0         1678           052J         CUSHUS         1567         USSR         2 UNN         717.9         64.9         3339           055G         CUSHUS         1567         USSR         6 UNN         717.9         64.9         3339           055G         CUSHUS         1560         USSR         6 UNN         70.6         65.2         38794           055G         CUSHUS         1570         USSR         8 UNN         100.6         74.1         808           055G         CUSHUS         1574         USSR         11 UNN         100.7         74.1         808           055G         CUSHUS         1574         USSR         8 UNN         100.6         62.6         20299         22           055G         CUSHUS         1574         USSR         22 UNN         104.7         83.0         1005 <tr< td=""><td></td><td></td><td>15003</td><td>USSR</td><td>- 1</td><td>114.8</td><td>76.0</td><td>1474</td><td>1422</td><td>1</td><td></td></tr<>			15003	USSR	- 1	114.8	76.0	1474	1422	1	
15005   1500	l	COSMOS	15004	USSR		114.7	74.0	1474	1406		
052J (15006 USSR 28 MAY 111.1 (1.0 to 1.0 to	- 1	SUMSOO	15005	USSR		•	9	2	1 2 2 2 2	1	
0.554 (USMUS 1569 15043 USSR 1 JUN 91.0 72.8 339 0.556 (COSMUS 1570 15032 USSR 6 JUN 717.9 64.9 39331 0.556 (COSMUS 1570 15032 USSR 6 JUN 100.7 74.1 808 0.556 (COSMUS 1570 15032 USSR 8 JUN 100.7 74.1 808 0.556 (COSMUS 1570 15032 USSR 8 JUN 100.7 74.1 808 0.556 (COSMUS 1574 15039 USSR 21 JUN 104.8 83.0 1005 0.624 (COSMUS 1574 15055 USSR 21 JUN 104.8 83.0 1005 0.625 (COSMUS 1574 15057 USSR 22 JUN 1435.9 0.1 35790 30 0.636 (COSMUS 1574 15057 USSR 22 JUN 1435.9 0.1 35790 30 0.637 (COSMUS 1577 USSR 22 JUN 164.5 83.0 1008 0.638 (COSMUS 1577 USSR 22 JUN 164.5 83.0 1008 0.638 (COSMUS 1577 USSR 22 JUN 164.5 83.0 1008 0.638 (COSMUS 1578 15032 USSR 22 JUN 164.7 83.0 0.1 35790 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0			15006	USSR		•	0.4.0	10/8	424		
0550         COSMOS 1569         15027         USSR         6 JUN         717.9         64.9         39331           0550         15030         USSR         6 JUN         706.8         65.2         38794           0550         15032         USSR         8 JUN         100.7         74.1         808           0556         15033         USSR         8 JUN         100.6         74.1         808           0556         15034         USSR         8 JUN         100.6         74.1         801           0556         15034         USSR         13 JUN         718.0         62.6         20299         28           0556         15034         USSR         13 JUN         718.0         62.6         20299         28           0556         15034         USSR         21 JUN         718.0         62.6         20299         28           0558         15040         USSR         21 JUN         1435.9         0.1         35790         35790         35790         35790         35790         35790         35790         35790         35790         35790         35790         35720         35720         35720         35720         35720         35720	1		15043	USSR	1	91.0	72.8	339	308	1	
0550         COSMIC         15030         USSR         6 JUN         706.8         65.2         38794           0566         15031         USSR         8 JUN         100.7         74.1         808           0566         15032         USSR         8 JUN         100.7         74.1         808           0566         15032         USSR         8 JUN         100.6         74.1         808           0560         15039         USSR         13 JUN         100.6         74.1         801           0550         15039         US         13 JUN         100.6         74.1         801           0528         15039         US         13 JUN         104.8         801         1055           0528         15039         US         13 JUN         104.8         83.0         1055           0620         15035         USSR         21 JUN         104.8         83.0         1055           0620         15055         USSR         22 JUN         1435.9         0.1         35790         37           0630         15076         USSR         22 JUN         1435.9         0.1         35790         35035           0640			15027	assn	]	717.9	6.99	39331	1028		
0566         COSMODE 1570         15031         UNSR         B JUN         100.7         74.1         808           0566         15032         USSR         8 JUN         100.7         74.1         801           0566         15032         USSR         8 JUN         100.6         74.1         801           0566         15067         USSR         11 JUN         100.6         74.1         801           0598         15067         USSR         11 JUN         718.0         62.0         20299         22           0598         15067         USSR         21 JUN         104.8         83.0         1005         31           0628         COSMOS 1574         15057         USSR         21 JUN         104.8         83.0         1005           0628         COSMOS 1574         15057         USSR         22 JUN         104.8         83.0         1005           0630         LOSAG         15057         USSR         22 JUN         104.9         83.0         1005           0631         LOSAG         15076         USSR         22 JUN         1507.0         1507         1507         1507         1507         1507         1508         1508	Į .		15030	USSR		706.8	65.2	38794	1018		
056B         15032         USSR         8 JUN         100.6         74.1         802           056C         15033         USSR         8 JUN         100.6         74.1         801           056C         15057         USSR         11 JUN         100.6         74.1         801           059A         15047         USSR         11 JUN         718.0         62.6         20299         2           059A         1504         USSR         13 JUN         718.0         62.6         20299         2           059A         1505A         USSR         21 JUN         718.0         62.6         20299         2           062B         1505A         USSR         21 JUN         104.7         83.0         1005           063B         15075         USSR         22 JUN         1435.9         0.1         35790         3           063B         15075         USSR         22 JUN         1435.9         0.1         35790         3           063B         15076         USSR         22 JUN         1435.9         0.1         35790         3           064B         15076         USSR         22 JUN         164.6         83.0         100	- 1		15031	ASSI	1	R-mi		100		i	
058B         15757         USSR         8 JUN         100.6         74.1         801           058B         15067         USSR         11 JUN         90.5         70.0         20299         20           059A         15067         USSR         21 JUN         718.0         62.6         20299         20           059B         15060         USSR         21 JUN         104.3         83.0         1005           062B         COSMOS 1574         15055         USSR         22 JUN         1435.9         0.1         35790         3           063B         LOSAB         LISOF         USSR         22 JUN         1457.0         46.7         22560         3         258834         3         3         35035         3         3         3         35035         3 <td< td=""><td></td><td>~ .</td><td>15032</td><td>USSR</td><td></td><td>100.7</td><td>74.1</td><td>832</td><td>805</td><td></td><td></td></td<>		~ .	15032	USSR		100.7	74.1	832	805		
058E         15067         USSR         11 JUN         90.5         70.0         312         20           059A         15039         US         13 JUN         718.0         62.6         20299         20           059B         15040         USSR         21 JUN         104.8         83.0         1005           062B         COSMOS 1574         15056         USSR         21 JUN         104.8         83.0         1005           062B         COSMOS 1574         15057         USSR         22 JUN         1435.9         0.1         35790         37           063B         RADUGA 15         15076         USSR         22 JUN         1435.9         0.1         35790         37           063B         15076         USSR         22 JUN         1435.9         0.1         35790         37           063E         15076         USSR         22 JUN         164.9         28934         35.0         1008           065C         15071         USSR         22 JUN         164.9         28934         36.0         1591           065C         15071         USSR         27 JUN         104.6         83.0         994           065B         1	t	C	15757	USSR	ľ	100.6	74.1	801	773		
059A         15039         US         13 JUN         718.0         62.6         20299         67.7           059B         15040         US         13 JUN         104.7         83.0         1005           062B         15055         USSR         21 JUN         104.7         83.0         1005           062B         15057         USSR         22 JUN         1435.9         0.1         35790         3           063B         15075         USSR         22 JUN         1435.9         0.1         35790         3           063E         15076         USSR         22 JUN         1435.9         0.1         35790         3           063E         15076         USSR         22 JUN         1435.9         0.1         35790         3           063E         15076         USSR         22 JUN         1636.2         6.9         28834         3           065C         15071         USSR         27 JUN         104.6         83.0         994           065C         15078         USSR         27 JUN         104.6         83.0         994           065B         15080         USSR         28 JUN         103.6         65.1	- 1		15067	USSR	- 1	90.5	70.0	312	287	1	
0628         COSMOS 1574         15055         USSR         21 JUN         104.8         83.0         1005           0628         COSMOS 1574         15055         USSR         21 JUN         1435.9         0.1         35790         37           0638         RADUGA 15         15075         USSR         22 JUN         1435.9         0.1         35790         3           0636         LSO75         USSR         22 JUN         572.0         46.7         32760         3           063E         LSO76         USSR         22 JUN         502.5         46.9         28834         3           063E         LSO76         USSR         22 JUN         134.2         66.9         28834         3           065C         LSO77         USSR         27 JUN         104.6         83.0         994           067B         LSO78         USSR         27 JUN         104.6         83.0         994           067B         COSMOS 1578         USSR         27 JUN         104.6         83.0         994           068B         COSMOS 1578         USSR         29 JUN         103.9         50.7         1540           069B         COSMOS 1581         15096 </td <td></td> <td>er i</td> <td>15039</td> <td>S</td> <td>•</td> <td>718.0</td> <td>62.6</td> <td>20299</td> <td>20064</td> <td>1</td> <td></td>		er i	15039	S	•	718.0	62.6	20299	20064	1	
062B         RADUGA 15         15056         USSR         21 JUN         16359         0.1         35790         3           063B         RADUGA 15         15075         USSR         22 JUN         1435.9         0.1         35790         3           063B         15075         USSR         22 JUN         572.5         46.9         28834         3         28834         3         28834         3         28834         3         26835         3         26835         3         26835         3         26836         3<	1	COSMOS	15055	USSR	1	104.8	83.0	1005	965		
063A         RADUGA 15         15057         USSR         22 JUN         15057         0536           063B         15076         USSR         22 JUN         572.0         46.9         28834           063E         15076         USSR         22 JUN         502.5         46.9         28834           063E         15071         USSR         22 JUN         1304.2         35035         35035           067A         15071         USSR         27 JUN         104.6         83.0         994           067B         15078         USSR         27 JUN         104.6         83.0         994           067B         15078         USSR         27 JUN         104.6         83.0         994           067B         15080         USSR         29 JUN         103.9         50.7         1591           069B         15086         USSR         29 JUN         103.9         50.7         1540           069A         15330         USSR         29 JUN         103.6         65.0         951           071A         15330         USSR         29 JUN         103.6         65.0         951           072A         15096         USSR         3 JU	į		15056	MSSR	Į.	104.7	83.0	26700	26776	1	
063E         15076         USSR         22 JUN         502.5         46.9         28834           063E         15693         USSR         22 JUN         1394.2         0.0         35035         3           065C         15671         USSR         27 JUN         104.7         83.0         1008           067B         15078         USSR         27 JUN         104.6         83.0         994           067B         15078         USSR         27 JUN         104.6         83.0         994           068A         COSMOS 1578         15081         USSR         28 JUN         103.3         50.7         1591           069B         LSAB         USSR         29 JUN         103.9         65.0         951           069B         LSAB         USSR         29 JUN         103.6         65.0         951           071A         COSMOS 1581         15095         USSR         29 JUN         103.6         65.0         951           071A         COSMOS 1581         15095         USSR         3 JUL         705.6         63.3         38239           072B         USSR         5 JUL         104.0         82.5         955         955		RADUGA	15057	USSR		572.0	46.7	32760	133	1	
065C         15693         USSR         22 UNN         1394.2         0.0         1503.5         4503.5	1	3	15076	USSR	i	502.5	46.9	28834	284		
065C 067A 067A 067B 067B 068A 068A 068A 068A 068A 068A 068A 068A	1		15693	assn	1	1394.2		2104	38000	•	
O67A         COSMUS 157B         15078         USSR         27 JUN         104.6         83.0         994           068A         COSMOS 157B         15000         USSR         28 JUN         103.9         50.7         1591           068A         COSMOS 157B         15081         USSR         29 JUN         103.9         65.1         970           069D         15330         USSR         29 JUN         103.6         65.0         951           071A         COSMOS 1581         15095         USSR         3 JUL         721.1         63.0         38810           071D         15096         USSR         3 JUL         705.6         63.3         38239           072A         METEOR 2-11         15099         USSR         5 JUL         104.0         82.5         958           072B         USSR         2 JUL         104.0         82.5         955			15071	SO	•	104.7	- NO.	/AILABLE 1008	955	1	
068A         COSMOS 1578         15030         USSR         28 JUN         103.9         50.7         1591           068B         068A         COSMOS 1579         1508I         USSR         28 JUN         103.9         65.1         970           069D         15330         USSR         29 JUN         103.6         65.0         951           071A         COSMOS 1581         15095         USSR         3 JUL         721.1         63.0         38810           071D         15096         USSR         3 JUL         705.6         63.3         38239           072A         METEOR 2-11         15099         USSR         5 JUL         104.0         82.5         958           072B         USSR         2 JUL         104.0         82.5         958         955	1		15078	USSR	ĺ	104.6	83.0	\$66	958		
1508  USSR 28 JUN 103.3 50.7 1540   10694   15084   15085   USSR 29 JUN 103.9 65.1 970   970   971   970   971			15030	USSR	- [	•	50.7	1591	295	1	
0690         COSMUS 1579         15085         USSR         29 JUN         103-6         65.0         951           0690         071A         15095         USSR         3 JUL         721-1         63-0         38810           071A         071A         15095         USSR         3 JUL         705-6         63-3         38239           071D         15099         USSR         3 JUL         104-0         82-5         958           072B         15100         USSR         5 JUL         104-0         82-5         955           072B         15100         USSR         2 JUL         104-0         82-5         955			15081	USSR	-	103.3	50.7	1540	291 917		
00500 071A COSMUS 1581 15095 USSR 3 JUL 721.1 63.0 38810 0710 072A METEOR 2-11 15099 USSR 5 JUL 104.0 82.5 958 072B 15100 USSR 5 JUL 104.0 82.5 955			15085	200	1	103.6	65.0	951	906	1	
0710 0724 METEOR 2-11 15099 USSR 3 JUL 104.0 82.5 958 0728 15100 USSR 5 JUL 104.0 82.5 955 0728 15100 USSR 5 JUL 104.0 82.5 955			15095	USSR	· ~	721.1	63.0	38810	1708	ı	
0724 METEOR 2-11 15099 USSR 5 JUL 104.0 82.5 955 15120 USSR 5 JUL 104.0 82.5 955 955 15132 1513			15098	USSR		705.6	63.3	38239	1513		
15100 USSR 5 JUL 104.0 62.5 755	- 1		15099	USSR	1	0.40	26.5	990	010	1	
		8	15100	USSR		104.0	72.0	356	322		

		636	50010	3460	3010	1	93	21261		
		19947	20414	63.4	717.9	8 SEP	US	15271		1984 097A
		1426	38206	63.0	703.2	7 550	USSR			- 1
		1422	06688	62.8	717.8	7 SEP	USSR	15267	CDSMDS 1596	1984 0964
		284	19179	52.2	339.2	◆ SEP	USSR			*
		19086	19182	64.7	675,9	<b>♦ 5€₽</b>	USSR			-
		19086	19172	64.7	675.7	♠ SEP	USSR			
		19091	19167	64.8	675.7	4 SEP	USSR		COSMOS 1593	1984 095A
		367	37622		6684	Т.		15246		
		yer	00036	27.6	637.8	ALIC ALIC	200	15245		1984 093E
35*		35782	35791	0.0	1436.1	-		15237	TELSTAR 3C	
476		25782	16791	2	1436.1	ł		15236	ന	1984 093C
***		35794	35795	0.0	1436.2	۹ -		15235	S8S •	
			AVAILABLE	NOT	ELEMENTS	28 AUG	S	15226		1984 091A
		136	19966	۲	588.9	-1				1984 0905
		104	6457	46.7	157.5				4	
		559 36777	<b>♦0832</b>	63.5	738.9	24 AUG	USSR	15223		1984 0904 1484 0840
		558	39788	*	717				TOL NI WAY I - 62	- 1
		519	49667	27.5	926.1			_		•
		548	4071	28.9	134.3	16 AUG	S S	15205		1984 0880
		1002	113617	26.9	2659	- 1		10761	6K.5	- 1
		402	113818	27.0	2653.4			15200	IRM	
000.	2271.000.	1010	49782	4.0	939.5			15199	CCE	
		1300	30905	62.9	731.0	10 406	485B	20101	MOCINETIA E OF	1984 0850
		1089	20107	3	717 0	- 1			- 1	1384 0854
(TI		1491	1499	82.6	115.9		USSR			
<b></b>		323 A10	430 430	£ ? .	91.5	- A	S S S S S S S S S S S S S S S S S S S	15167	COSMOS 1588	1984 0834
<b>,</b>		323	335	73 9	900	- 1	93311			
እ		241	31808	6.7	556.2	A AUG	ESA			
v		35783	35792	9	1436.2	A AUG	RANGE	15159 6	TELECOM 14	1984 0818
oc		35719	35854	0.1	1436.1	4 AUG	ESA		ECS 2	
		33/86	18/25	28.6	1430-1	2 AUG	LADAN	15157	SHO U	1984 0806
1		921	38836			- 1	45 X		- 1	i
10		934	39423		717.8	2 AUG	USSR		COSMOS 1586	
		35718	35885	0.2	1436.9	1 AUG	USSR	1		1984 078F
		130	33571	46.6	587.2	1 AUG	USSR			
	,	35781	35790	0.2	1436.0	1 AUG	USSR	15144	HORIZONT 10	1984 078A
									ES (CUNT.)	1984 LAUNCHES
MHZ) NOTES	FREQ. (MHZ)	<b>X3.</b>	KM.	NATION	MINUTES	LAUNCH	SOURCE	NUMBER S	NAME	DESIGNATION
•			:							

			30.80	OBJECTS IN ORBIT	118					
INTER-		CATALOG			DEPION	INCL I-	APOGEE	PERICEE	TRANSMITTING	
DESIGNATION	I NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	KM.	KM.	FREQ.(MHZ)	NOTES
1984 LAUNCHES	IES (CONT.)									
1	GALAXY 3	15308	US	21 SEP	1436.2	0.0	35793 355	35782		
Ţ	CUSMUS 1601	15326	USSR	١	÷ u	65.8 NOTE	500	477		38,
1984 105A 1984 105A	COSMOS 1602	15331	USSR	i .	I	82.5	<b>664</b>	629		
1984 1058 1984 106A	CDSMDS 1603	15333	USSR	1	101.9	0.17	853	847		
1984 106B		15334	USSR	1		9.99	853	811		
1984 106F	CDSMUS 1604	15338	USSR	4 OCT	718.7	62.8	39218	1184		
1984 1070 1984 103B	ERBS	15355	ussa us	2 00.1	96.8	57.0	605	109	2287.500.	*
1984 109A	COSMOS 1605	15359	USSR	11 001	104.7	82.9	1017	947		
1984 1098		15362	SS S	12 001	108.9	90.1	1198	1150		
- 1		15363	Sm	- 1	97.3	89.8	943	313		
		15371	۲ ا در د	12 OCT	96.2	90.2	84 / 829	308		
1984 111A	CDSMUS 1606	15369	USSR		97.6	82.5	199	628		
1984 1118	CUSHOS 1607	15370	USSR	31 001	104.1	65.0	984	918		
- 1		15503	USSR	- 1	103.8	65.0	963	910		35.4
		15383	CANADA	90N 6	1436.1	1 • 4 2 . 5	35795 35792	35779		354
1984 1130	TAKE THE TAKE	15387	CANADA	ì	637.1	25.3	35925	369		
- 1	- 1	15390	Sn		278-3	777	25705	35780		
1984 114A	SPACENET 2	15385	US FSA	10 NOV	1436.2	2.3	35806	35772		
1		15388	ESA	NON OI	636.2	7.3	35911	338 164		
1984 115A		15391	NATO	i	1436.3	5.6	35795	35785		
1984 1158 1984 1150		15402	S		648.7	23.0	36452	436		
1984 117E	COSMOS 1610	15439	USSR	15 NOV	104.9	82.9	1010	<b>\$96</b>		
- 1	- 1	15399	8550	NON SC	104.7	92.7	380	334	•	
		15423	U33K	ہ ء	ELEMENTS	NTS NOT	AVAILABLE			
1984 123A	NDAA 9	15427	SN	12 DEC	102.0	0.66	862	841	136.770,137.770	10, 4*
1984 1238		15440	ns	12 DEC	101.9	98.9	853	842		
1984 123C	MDLNIYA 1-63	15429	USSR		7.7.7	63.0	39514	836		
- 1	WECK 1	15439	USSR	15 DEC	HELIO	HEL I DCENTRIC	ORBIT			
1984 1250	VEGA 1	15447	HSSN		HEL TO	HEL IDCENTRIC	DRBIT	944	•	
	COSMUS 1615	15446	USSR	20 DEC	6.60 6.60	65.8	486 488	445		
1384 1278		****						,		

CANTIDN   MARE   NUMBER SQURCE   LAUNCH   MINUTES   MATION   KH.   KH.	NATIONAL INTERT	CATAL OG			PER100	# ************************************	APOCES	PERICES	- TRANSMITTING
LAUNCHES (CONT.)   15449   USSR   21 DEC   HELIDCENTRIC ORBIT   1294   USSR   21 DEC   HELIDCENTRIC ORBIT   1294   USSR   21 DEC   HELIDCENTRIC ORBIT   1294   USSR   US	NOT	-	SOURCE	LAUNCH		NATION	XI.	× 1.	FREQ. (MHZ)
128A   VEGA 2   15449   USSR 21 DEC   HELIDOCENTRIC CIRBIT   129A   15459   USSR 15 JAN   HELIDOCENTRIC CIRBIT   15469   JANA   7 JAN   HELIDOCENTRIC CIRBIT   15469   USSR 15 JAN	ł								
1290	128A VEGA	15449	USSR		HELIOCE	RIC	DR81T		
TANNEHES  1544 JAPAN 7 JAN HELIOCENTRIC ORBIT  1018 1547 1546 JAPAN 7 JAN HELIOCENTRIC ORBIT  1024 COSHOS 1617 1546 JAPAN 7 JAN HELIOCENTRIC ORBIT  1025 COSHOS 1617 1547 USSR 15 JAN 111.0 82.6 1110  1026 COSHOS 1621 1547 USSR 15 JAN 111.0 82.6 1110  1027 COSHOS 1622 1547 USSR 15 JAN 111.7 62.1 19740  1028 COSHOS 1623 1547 USSR 15 JAN 111.7 62.1 19740  1029 COSHOS 1623 1547 USSR 15 JAN 111.7 62.1 19740  1020 COSHOS 1624 1548 USSR 15 JAN 111.7 62.1 19740  1020 COSHOS 1627 1548 USSR 17 JAN 111.7 62.1 19740  1020 COSHOS 1627 1548 USSR 17 JAN 112.7 62.1 19740  1020 COSHOS 1627 1548 USSR 17 JAN 100.4 71.0 805  1020 COSHOS 1627 1548 USSR 17 JAN 100.4 71.0 805  1020 COSHOS 1627 1550 USSR 17 JAN 100.4 71.0 805  1020 COSHOS 1627 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1627 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1627 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1627 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1627 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1627 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1627 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1627 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1627 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1627 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1627 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1627 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1627 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1627 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1627 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1628 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1628 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1628 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1628 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1628 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1628 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1628 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1628 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1628 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1628 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1628 1550 USSR 18 JAN 100.4 71.0 805  1020 COSHOS 1628 1550 USSR 18 JAN		15453	SS	- 1	ELEMENT		VAILABLE		
00114 HS-TS 00126 CHRISTON 1617 15469 USSR 15 JAN HELIOCENTRIC ORBIT 00136 CHSHOS 1618 15471 USSR 15 JAN HELIOCENTRIC ORBIT 00136 CHSHOS 1618 15471 USSR 15 JAN 1114 113 8 82.6 11410 113 1140 1140 1140 1140 1140 1140	1985 LAUNCHES	10101				4			
1946   1948   1947   1948		15464	4044	7	HEL TOCE	F	BBIT		
CUSHOS   1618	8100	15465	JAPAN		HELIOCE	RIC			
0030 CDSHNS 1620 15471 USSR 15 JAN 113.7 82.6 1410 1703 CDSHNS 1622 15472 USSR 15 JAN 113.8 82.6 1410 1703 CDSHNS 1622 15474 USSR 15 JAN 113.9 82.6 1410 1703 CDSHNS 1622 15475 USSR 15 JAN 113.9 82.6 1411 1703 CDSHNS 1622 15475 USSR 15 JAN 114.7 62.1 39740 1946 CDSHNS 1622 15476 USSR 16 JAN 114.7 62.1 39740 1946 CDSHNS 1624 15481 USSR 17 JAN 100.6 74.0 805 1946 CDSHNS 1624 15481 USSR 17 JAN 100.6 74.0 805 1946 CDSHNS 1624 15481 USSR 17 JAN 100.6 74.0 805 1946 CDSHNS 1624 15481 USSR 17 JAN 100.6 74.0 805 1946 CDSHNS 1624 USSR 17 JAN 100.6 74.0 805 1946 CDSHNS 1626 15491 USSR 17 JAN 100.6 74.0 805 1946 CDSHNS 1626 15491 USSR 18 JAN 1947.8 0.7 35102 34 1946 USSR 1946.9 34 1946 USSR 1946.9 34 1946 USSR 1946.9 34 1946 USSR 1946.9 34 1946 USSR 1946.9 34 1946 USSR 1946.9 34 1946 USSR 1946.9 34 1946 USSR 1946.9 34 1946 USSR 1946.9 34 1946 USSR 1946.9 34 1946 USSR 1946.9 34 1946 USSR 1946 USS	OU3B CUSMOS	15470	USSR	- 1	114.0	82.6	1411	1405	
0036 CGSH05 1621 15475 USSR 15 AN 113.9 82.6 1411 10036 CGSH05 1622 15476 USSR 15 AN 113.9 82.6 1411 11004	SOMSOO DESCO	15471	HSSR HSSR	- 1	113.7	82.6	1410	1381	
003F CDSHOS 1622 15476 USSR 15 JAN 113.9 82.6 1411 1004	- 504503 - 3600	15473	4888	1			1410	1303	
0044 MDLNIYA 3-23 15476 USSR 16 JAN 717.7 63.1 39740 0040 15491 USSR 16 JAN 712.0 67.0 37.9 0066 1050 15491 USSR 17 JAN 100.6 71.0 80.9 0066 15492 USSR 17 JAN 100.6 71.0 80.9 0060 15492 USSR 17 JAN 100.6 71.0 80.9 0060 15492 USSR 17 JAN 100.6 71.0 80.9 0070 15493 USSR 17 JAN 100.6 71.0 80.9 0070 15493 USSR 18 JAN 100.3 71.1 8359 0070 15494 USSR 18 JAN 100.3 71.1 8379 0070 15494 USSR 18 JAN 100.3 71.1 82.7 0070 15495 USSR 18 JAN 100.3 71.1 82.7 0070 15496 USSR 2.4 JAN 100.3 71.6 63.6 34.61 0096 15491 USSR 2.4 JAN 100.3 71.6 82.5 658 0096 15491 USSR 2.4 JAN 100.3 71.6 82.5 658 0096 15491 USSR 2.4 JAN 100.8 82.5 658 0096 15491 USSR 2.4 JAN 100.8 82.5 658 0097 15491 USSR 1.7 JAN 100.8 82.5 658 0098 15491 USSR 1.7 JAN 100.8 82.5 658 00100 USSR 1.7 JAN 100.8 82.5 658 00100 USSR 1.7 JAN 100.8 82.5 658 00100 USSR 1.7 JAN 100.8 82.5 960 0126 15591 USSR 1.7 JAN 100.8 82.5 960 0126 15591 USSR 1.7 JAN 100.8 82.5 960 0127 15505 USSR 1.7 JAN 100.8 82.5 960 0128 15505 USSR 1.7 JAN 100.8 82.5 960 0129 15505 USSR 1.7 JAN 100.8 82.5 960 0129 15505 USSR 1.7 JAN 100.8 82.5 960 0129 15506 USSR 1.7 JAN 100.8 82.5 960 0129 15506 USSR 1.7 JAN 100.8 82.5 960 0129 15506 USSR 1.7 JAN 100.8 82.5 960 0129 15506 USSR 1.7 JAN 100.8 82.5 960 0129 15506 USSR 1.7 JAN 100.8 82.5 960 0129 15507 USSR 1.7 JAN 100.8 82.5 960 0129 15507 USSR 1.7 JAN 100.8 82.5 960 0129 15507 USSR 1.7 JAN 100.8 82.5 960 0129 15507 USSR 1.7 JAN 100.8 82.5 960 0129 15507 USSR 1.7 JAN 100.8 82.5 960 0129 15507 USSR 1.7 JAN 100.8 82.5 960 0129 15507 USSR 1.7 JAN 100.8 82.5 960 0129 15507 USSR 1.7 JAN 100.8 82.5 960 0129 15507 USSR 1.7 JAN 100.8 82.5 960 0129 15507 USSR 1.7 JAN 100.8 82.5 960 0129 15507 USSR 1.7 JAN 100.8 82.5 960 0129 15507 USSR 1.7 JAN 100.8 82.5 960 0129 15507 USSR 1.7 JAN 100.8 82.5 960 0129 15507 USSR 1.7 JAN 100.8 82.5 960 0129 15507 USSR 1.7 JAN 100.8 82.5 960 0129 15507 USSR 1.7 JAN 100.8 82.5 960 0129 15507 USSR 1.7 JAN 100.8 82.5 960 0129 15507 USSR 1.7 JAN 100.8 82.5 960 0129 15507 USSR 1.7 JAN 100.8 82.5 960 0129 15508 USSR 1.7 JAN 100.8 82.5 9	003F COSMOS	15474	USSR		113.9	82.6	1411	1398	
1949   1549   USSR   16 JAN   100.0   174   174   18	004A MOLNIYA	15476	USSR		717.7		39740	609	
1986   1988   1988   17 JAN   100.6   74.0   805	0050	15499	USSR	1	91.6	70.0	379	329	
1940   1549   1558   17 JAN   100.9   17.0   100.0   100.0   100.0   100.0   100.0   100.0   100.0   100.0   100.0   100.0   100.0   100.0   100.0   100.0   100.0   100.0   100.0   100.0   1540   USSR   18 JAN   1397.8   0.7   35102   34.0   100.0   1540   USSR   18 JAN   507.6   6.6   34.6   34.6   100.0   1540   USSR   18 JAN   507.6   6.6   34.6   34.6   100.0   1540   USSR   24 JAN   577.6   82.5   6.6   100.0   15545   USSR   1 FEB   104.0   82.5   100.0   100.0   15545   USSR   1 FEB   104.0   82.7   100.0   100.0   1255   USSR   1 FEB   104.0   82.7   100.0   100.0   1255   USSR   1 FEB   104.0   82.7   100.0   100.0   1255   USSR   1 FEB   104.0   82.7   100.0   1255   1255   USSR   1 FEB   104.0   82.5   5.0   100.0   1255   1255   USSR   1 FEB   104.0   82.5   5.0   100.0   1255   1255   USSR   1 FEB   104.0   82.5   5.0   5.5   100.0   10	006B	15483	USSR	ı	100.6	7	805	771	
0070 198120NT 11 15487 USSR 18 JAN 1397.8 0.7 35102 34 0070 198120NT 11 15487 USSR 18 JAN 1397.8 0.7 35102 34 0070 1981 15487 USSR 18 JAN 1397.8 0.7 35102 34 0074 198120NT 11 15489 USSR 18 JAN 1004.6 46.6 346.1 346.1 0098 15495 USSR 24 JAN 97.6 82.5 658 0098 15495 USSR 24 JAN 97.6 82.5 658 0098 15543 US 24 JAN 97.6 82.5 658 0098 15543 US 24 JAN 97.6 82.5 658 0098 15545 USSR 24 JAN ELEMENTS NOT AVAILABLE 1554 USSR 1 FEB 104.8 82.9 1009 0110 15545 USSR 1 FEB 104.8 82.9 1009 0110 15560 USSR 1 FEB 104.8 82.9 1009 0110 15571 USSR 6 FEB 104.0 82.5 960 012F 15572 USSR 6 FEB 104.0 82.5 960 013A HETEOR 2-12 15516 USSR 6 FEB 104.0 82.5 950 013A HETEOR 3-12 15560 USSR 6 FEB 104.0 82.5 950 013A ARABSAT 1 15560 SA 8 FEB 1436.3 0.0 35845 35 015A ARABSAT 1 15560 SA 8 FEB 1436.3 0.0 35845 35 015A COSM3S 1629 15574 USSR 21 FEB 1436.3 0.6 35802 35 016A COSM3S 1629 15574 USSR 21 FEB 1436.3 0.6 35802 35 016B USSR 1 FEB 1436.3 0.6 35802 35 016B USSR 1 FEB 1436.3 0.6 35802 35	_ 1	15491	USSR	~ I	101.3	74.1	835	802	
007F 15489 USSR 18 JAN 604.6 3461 3461 009A C05H05 1626 15495 USSR 24 JAN 97.6 82.5 658 009B 15495 USSR 24 JAN 97.6 82.5 658 009B 15543 US 24 JAN 97.6 82.5 658 009C 15543 US 24 JAN 97.6 82.5 658 009C 15545 US 24 JAN ELEMENTS NOT AVAILABLE 010D 15545 USSR 1 FEB 104.8 82.9 1017 011A C05H05 1627 15505 USSR 1 FEB 104.8 82.9 1007 012F 15571 USSR 6 FEB 88.8 72.8 228 012F 15571 USSR 6 FEB 88.8 72.8 228 012F 15571 USSR 6 FEB 104.0 82.5 960 012F 15571 USSR 6 FEB 104.0 82.5 960 012F 15571 USSR 6 FEB 104.0 82.5 960 012F 15571 USSR 6 FEB 104.0 82.5 960 012F 15571 USSR 6 FEB 104.0 82.5 950 0150 0150 USSR 1 FEB 104.0 82.5 950 0150 0150 USSR 1 FEB 104.0 82.5 950 0150 0150 USSR 6 FEB 104.0 82.5 950 0150 0150 USSR 6 FEB 104.0 82.5 950 0150 0150 USSR 6 FEB 104.0 82.5 950 0150 0150 USSR 6 FEB 104.0 82.5 950 0150 0150 USSR 6 FEB 104.0 82.5 950 0150 0150 USSR 6 FEB 104.0 82.5 950 0150 0150 0150 0150 USSR 6 FEB 104.0 82.5 950 0150 0150 0150 0150 0150 0150 0150	0070	15487	USSR	- 1	1397.8	0.7	35794	34963	
OUTPO   1020   15475   USSR   24 JAN   97.6   82.5   658	007F	15489	USSR	1	604.6	6.6	34461	153	
0100	8600	15495	USSR	- 1	97.6	82.5	658	627	
0100	1	15543	SO		ELEHENT	NOT	VAILABLE		
011B 15506 USSR   FEB 104.7 82.9 1009 120 120 15569 USSR   FEB 104.7 82.9 1009 1010 1010 1010 1010 1010 1010 10	0010	15545	SO		ELEMENT	NOT	VAILABLE		
15571   USSR 6 FEB 92.2   72.8 228	0118	15506	USSR	- 1	104.7	82.9	1009	951	
013A METEOR 2-12 15516 USSR 6 FEB 104.0 82.5 960 013B 104.0 82.5 957 014A 15517 USSR 6 FEB 104.0 82.5 957 014A 15546 US 8 FEB 104.0 82.5 957 014B 15546 US 8 FEB 104.0 82.5 957 015A ARABSAT 1 15560 SA 8 FEB 1436.3 0.0 35845 015C 58TS 1 15561 BRAZIL 8 FEB 1436.2 0.0 35790 015C 58TS 1 15562 ESA 8 FEB 637.3 6.5 36017 015B 015C 15574 USSR 21 FEB 1436.3 0.6 35802 015B 015C 15577 USSR 21 FEB 638.2 46.9 36106	1	15571	USSR	- 1	88.8	72.8	228	199	
014A 15546 US B FEB ELEMENTS NOT AVAILABLE 014B 15547 US B FEB ELEMENTS NOT AVAILABLE 015B ARABSAT 1 15560 SA B FEB 1436.3 0.0 35845 015C 5075 1 15561 BRAZIL B FEB 1436.2 0.0 35790 015C 15574 USSR 21 FEB 1436.3 0.6 32452 016A COSMOS 1629 15577 USSR 21 FEB 1436.3 0.6 35802 016F 15578 USSR 21 FEB 630.5 46.9 36176	013A METEOR 2-	15516	USSR		104.0		960	934	
0158     ARABSAT 1     1554     US     8 FEB     1436.3     0.0     35845       0158     SbTS 1     15561     BRAZIL     8 FEB     1436.2     0.0     35790       0150     15562     ESA     8 FEB     637.3     6.5     36017       0150     15563     ESA     8 FEB     567.4     6.8     32452       0160     15574     USSR     21 FEB     1436.3     0.6     35802       0166     15578     USSR     21 FEB     638.2     46.9     36146       0166     15578     USSR     21 FEB     630.5     46.9     35702		15546	Sn		ELEMENT	NOT	VAILABLE		
0158     5675     15561     BRAZIL     8 FE8     1436,2     0.0     35790       015C     15562     ESA     8 FE8     637.3     6.5     36017       015D     15563     ESA     8 FE8     547.4     6.8     32452       016A     COSMOS     1629     15577     USSR     21 FE8     638.2     46.9     36146       016F     15578     HSSR     21 FE8     630.5     46.9     35702	0158 ARABSAT	15567	SA SA	- 1	1436.3	200	35845	35736	
0150 15574 USSR 21 FEB 1436.3 0.6 35802 3 0160 CDSMOS 1629 15577 USSR 21 FEB 638.2 46.9 36146 0166 15578 USSR 21 FEB 630.5 46.9 35792	0150	1	ESA	- 1	637.3	6.5	36017	288	
0166 15578 USSR 21 FEB 630.5 46.9 35792	016A COSMOS 162	15574	USSR		1436.3	0.6	35802	35779	
11/1/ 6/6/2 Paris 6/6/2 10/1/2	1	15578	USSR	. 1	630.5	46.9	35792	163	

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NOTES

DESIGNATION N. 1985 LAUNCHES (CON 1985 0188 COSMUS 1985 0208 COSMUS 1985 0218 COSMUS										
LAUNCHES 018A CC 018B 020A CC 021A GE	NAME	NUMBER	SOURCE	LAUNCH	MINUTES	NATION	KM.	км.	FREG.(MHZ)	NOTES
018A 0188 020A 021A	(CONT.)									
020A 021A	HOS 1631	15584	USSR	27 FEB	94.4	6.59	512	465		
0214	405 1633	15592	USSR	Ι.	97.6	82.5	656	631		
21.0	SAI	15595	SH	13 MAR	100.5	108.0	812	756		
1985 0216		15613	s s	- 1		108.5	787	692		
		15614	Sn	13 MAR	100.1	108.2 107.8	783 846	743		
021F		15616	ns		101.6	107.6	925	742		
1985 022A COSP	COSMUS 1634	15597	USSR	14 MAR	104.6	82.9	666	956		
1	405 1635	15617	USSR	. 4	115.8	74.1	1511	1471		
0238		15618	USSR		115.6	74.1	1493	1472		
023C	1	15619	855	21 MAR	451		14.78	1656		
1985 0230 CUSMUS	MUS 1638	15621	USSR	21 MAR	115.1	76.1	1478	1439		
023F	· ·	15622	USSR	21 MAR	114.9	74.1	1477	1425		
1985 0236 COSMOS	40S 1641	15623	ASSI 1558	21 MAR	114.6	74.7	1476	1397		
023.1	1	15625	USSR	- 1	118.0	76.1	1710	1673		
	AN 14	15626	USSR	22 MAR	1436.3	0.2	35801	35780		
1985 0245		15632		1	620.7	47.0	35298	152		
- 1		15633	USSR	22 MAR	596.8	6.68	34110	95		
025A	INTELSAT VF10	15629	1150	22 MAR	1436.2	0.0	35812	35767 231		
1985 0236		15647	85511	3 APR	0.08	70.3	288	260		
1985 0274		15650	USSR	3 APR	91.8	70.3	386	331		
0288	3	15642	CANADA	-	1436.1		35798	35777		00 k
	COM 1V-3	15643	3 2	13 600	626.8	22.9	35351	313		
1985 0280		16229	511	ı	289.0	22.0	15882	318		
030A	l	15653	USSR	-	93.3	65.0	444	424		
1985 031A COSMOS	COSMOS 1667	15661	USSR	26 APR	5783.7	76.8	194734	5975		
0330	[	15664		9	5784.8	65.0	200315	620		1
0348	AT 1	15666	Sn :	29 APR	91.1	57.0	339	318		32 <b>+</b>
4563	GSTAR 1	15677	EDANCE	NAM A	1436.2	0.0	35804	35771		
1985 0356 1EL		15679	ESA	8 MAY	637.3	7-1	36038			
1.		15680	ESA		572.3	7.0	32676	235		
1985 0360		15742		- 1	92.8	72.8	300	345		
036L	0841 308303	15754	USSK	12 MAY	91.9	64.8	19174	19084		
	CUSMUS 1651	15698	USSR		675.7		19140	19118		
0370		15699		. [	675.8	64.8	19161			
		15702	USSR	17 MAY	340.5	51.9	19162	330		
1985 037H		15715	USSR		340.2	52.0	19219	310		
0404	MOLNIYA 3-24	15738	USSR	29 MAY	717.9	62.9	39655	ÇID.		

		000		2	,				000	
1000	1260	89.8	107.9	ALIG OOK	<b>.</b> .	55	75651	OESSAN + 30 call	0668	
1001	1350	60.0	107.0	A 0 0	ء د	5007	15035	ANS COA		005
970	1063	64.9	104-0	AUG	<b>-</b> +	4550	16213	COSHOS TOTO	0640	
200	24004	02.0	131.9	ָבְּיֻ בְּיַבְּיִבְּיִבְּיִבְּיִבְּיִבְּיִבְּיִבְּיִ		USSE	15020	COCHOC 1430	0100	
1	2006			4	;	46.6	15,00	HULNITA 3-23	2 2	- 1
217	446	82.4	90.1	JUL	10	USSR	15920		0590	-
626	663	82.5	97.6	4	4	U55R	15890		0588	- 1
627	664	82.5	97.7	חר	8	USSR	15889	COSMOS 1666	058A	
245	35320	6.9	622.9	=	4	ESA	15876		0568	1985
	DRBIT	HELIOCENTRIC	HELID	קר	2	ESA	15875	610110	056A	
	26146		82.	4	1	\$	15874	•	9558	
35771	35805	0.0	1436.2	SUN	30	1150	15873	INTELSAT VA F11	055A	
257	274	82.3	89.8	<b>4</b>		455P	15840	COSMOS 1663	0524	-
453	504	65.9	94.2	S N	19	USSR	16257		050M	
168	916	65.0			10	USSR	16256		9501	1
	508	65.8	r. 46		10		16017		050K	_
	405	-5-0	83		5	45.50	1		950	
	486	65.8	94.0	CZ	19	USSR	16015		050H	
	507	15.0	94.2	404	1	USSR	16014		0506	1
	488	65.8	93.7	Š	19	USSR	16010		050F	
	183	45.8	934		1	USSA	16009		9505	- 1
	488	65.8	93.7		19	USSR	16008		0500	
	152	\$	93.7	₹	   	<b>USSR</b>	15835		9906	1385
457	519	65.8	94.4		19	USSR	15834		050B	
	518	6548	94.5	1	1	USSR	15833	COSMOS 1662	0504	- 1
894	39801	63.0	724.7		18	USSR	15830		0490	
886	7446	\$2.9		1	1	USSR	15827	COSMOS 1661	0494	
341	37201	25.0	661.5		18	S	15837		U48H	
	35485					<b>F</b>	15836		9.00	
380	35845	25.0	635.7		17	S	15832		048F	
35792	36791	•				<b>F</b>	15826		0480	1
35737	35833		1436.1	_	18	SA	15825	ARABSAT 18	048C	-
36776	16708	P	14261	ł	17	**************************************	15824	MUREL OS A	0488	
1480	1518	73.6	116.0		14	USSR	15822		0476	-
1480	1623	13	-	ı	ļ	155 155 155 155 155 155 155 155 155 155	15821	CUSMOS 1660		
357	482	72.9	93.0		13	USSR	15871		H940	
	306	72.0	92.0	1	1	HSSB.	15868		046	1
728	39202	63.8	709.2		_	USSR	15811		0450	-
	507	62.9	91.5	1	-	USSR-	15810		0456-	
	39610	63.7	717.6		<b></b>	USSR	15808	COSMOS 1658	045A	-
	355	51.5	88.5			USSB	16097		0436	1
	847	66.6	101.4		30	USSR	15774		042F	
	851	66.6	101.6		ا ا	USSR	15773		0426	1
802	858	71.1	101.5		30	USSR	15772		0420	
	859	121	101.5		به	HSSH	15755	COSMOS 1656	042A	1985
971	1008				30	USSR	15752		0418	-
973	1015	2			1	- RSSB	15751	COSMUS 1655	\$ <b>*</b>	
	10001	6.70	132.2	YAY	27	こととス	14161		(100	1700

INTER-NATIONAL DESIGNATION

NAME

NUMBER SOURCE

LAUNCH

MINUTES

NATION

APOCES.

PERICES TRANSMITTING
KM. FREQ. (MHZ)

NOTES

OBJECTS IN ORBIT

ORIGINAL PAGE IS OF POOR QUALITY

MATIONAL		CATALOG		DE8100	INCL I-	APOGEE	PERICEE	TRANSMITTING
DE SIGNATION	NAME	NUMBER SOURCE	CE LAUNCH	MINUTES	NATION	Æ.	KA.	FREQ. (MHZ)
1985 LAUNCHES	ES (CONT.)							
1985 066D		15950 US	3 AUG	107.9	89.8	1260	966	
1985 066E			3 406	107.9	888	787	985	
			3 AUG	107.5	90.3	1218	1006	
	CUSMUS 1674	15045	α	97.6	82.5	099	627	
1985 0698	PADILICA 16.		9	1436-1	100	35823	35749	
			•	641.7		36367	162	
- 1		١		646.5	8-94	36583	181	
			8 AUG	1472.4	1.0	36542	30445	
1985 071A	COSMOS 1675	15055 11558	2	708.2	63.1	39106	174	
1985 0710	A THAT	7	: =	HELLD	- 1	ORBII		
1			18	HEL 10	HELIOCENTRIC OF	ORBIT	211	
	1	10.021 LEGG.	1	717.7	6,2,9	39541	808	
	MULNITA 1-54		22	732.4	63.0	40246	827	
1985 075A	CUSMUS 1677		23	103.9	64.7	992	891	
	' -	1		1436.2	000	35795	35779	
[	ASC 1	•	27	1436.1	0.1	35791	35782	
	SYNCOM 14-4	1	3 2	1		34151	A15	
		15996 AUSIKL	KL 27 AUG	285.0	27.6	15567	386	
1985 0766			59	638.3	26.6	35938	421	
- 1			77	91.3	28.5	379	736	
		16389 USSR	R 29 AUG	104.9	71.0	1129	845	
1985 077W			29	104.8	71.0	1130	841	
			29	105.0	71.0	1167	841	
l	COSMOS 1680	16011 USSR	4	100.7	74.1	804	782 773	
1985 0798			R 17 SEP	91.5	51.6	350	344	
	COCMOS 1682		9	93.3	65.0	144	427	
1		_	13	91.4	72.9	364	320	
1985 6830 1985 0835		16124 USSR	19	93.6	72.9	526	376	
- 1			6	91.4	72.9	358	328	
	CDSMDS 1684	16064 USSR	24 SEP	717.9	0.54	39110	660	
- 1			2		72.9	344	326	
1985 0850		16135 11558	77	92.1	72.9	402	350	
1985 UB5F			27	93.5	72.9	521	365	
			77	91.0	23.0	360	326	
		16159 USSK	K 21 SEP	91.9	72.9	390	367	
1985 086A	CDSM0S 1686		27	91.6	51.6	354	350 295	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	16128 USSK	29 SED	1436-1	• •	35817	35756	
1985 087A	INTELSAT VA F-12				22.9	34266	299	
			•					

	668	39689	63.1	717.9		USSR	16235	COSMUS 1701		
3R+	204	222	57.0	90.0	ł	US:	16231	H GMAR		1
	505	38832	62.9	701.1	28 001	USSR	16223			
	240	35779	47.3	631.7		COUR COUR	91791	**************************************	1027	1985
	369	35812	47.2	632.7	- 1	1888 1888	16215			- 1
	35611	35771	1.3	1431.2	25 OCT	USSR	16214			
	35772	35807	-	143643	1	USSR	16199	COSMOS 1700		-
	1222	1247	82.5	110.2	24 OCT	USSR	16194			
	622	38754	63.0	698.1	23 OCT	USSR	16197	METERS 3	3660	1985
	215	510	63-0	94.8	22 85	USSR	16190		99,90	- 1
	214	573	63.0	92.4		USSR	16189		0990	-
	607	39749	63.1	717.8	i .	USSR	16187	MOLNIYA 1-65	099A	1985
	659	39207	02.0	707-9	52 OCT	USSA	16186		İ	•
		95758			- 1	9331	16101	C031103 I030		1985
L	834	849	71.0	101.8	22 OCT	USSR	16182	COCHOC 1 COO	097B	t t
רו	946	22.5	77.0	101.0		USSA	16161	COSMOS 1697		-
A	1 350	1433	83.4	113.6	9 001	USSR	16272		094R	
nð	1197	1603	82.7	113.6	9 OCT	USSR	16270		094P	1985
8	1402	1363	200		1	4858	16269		942	
00	1407	1672	82.7	115.1	9 007	88811	16268		094M	1985
)d	1396	1432	82.6		9 001	USSR	16266		094K	
4	1390	1928	82.6	114.1	9 061	USSR V	16265		0940	1985
0	1413	1468			- 1				0046	
	1402	1414	82.6	114.0		USSR	16143		094F	
	1304	1413	83.0	113.0	867	4888 1	16142	1	3460	- 1
	1387		•	113 0	9 001	9551	14141	2201 SUMSUU	0940	-
	1409	1413	82.6	114.0	9 001	USSR	16139			1985
	1361	20690	8:	11317	967	\$ 5	16138	COSMOS 1690	4460	
	19829	20532	3 9	268.2	300	- 4	16137		86.60 WC.60	i
			N	ELEMENTS		S	16119		092E	1985
35*		AVAIL ABLE	N	ELEMENTS	3 CT	\$ 5	81191 / 1191		0920	1985
35*		WATE ABLE	1	STEMENTS		45	16116		952	- 1
	652	40497	63.1	734.0	3 OCT	USSR	16125		0910	
	579	39768	63.0	717.6	3 001	USSR	16112	MULNIYA 3-26	0918 A160	1985 1985
	577	668	98.0	97.2	1384	USSR	16111	,	8666	- 1
	568	655	98.0	96.9		USSR	16110	COSMOS 1689	090A	
	345	539	50.7	93.4	2 OCT	USSR	16107	COSMOS 1688	089A	1985
								S (CONT.)	LAUNCHES	1985
FREQ. (MHZ) NOTE	XX.	KH.	NATION	HINUTES	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION	16
43×11011441110	0001000	ABRCEE	INCL	DE6100			92		TANGE CALL	a

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NAME   NUMBER SOURCE LAUNCH   MINUTES   MATION   KM+   KM+	MATIONAL										
USAN CHES (CONT.)   USAN USAN   USAN USAN   USAN USAN USAN   USAN USAN USAN USAN USAN USAN USAN USAN	DE SI GNATIUI			SOURCE	LAUNCH	MINUTES	NATION	K.	X.	FREQ. (MHZ)	NOTES
1050   10244   10588	1	1									:
1006C   10286   1055R   13 NOV   91.0   72.8   955   1006C   10288   1055R   13 NOV   91.0   72.8   562   1006C   10280   1055R   13 NOV   91.0   72.8   562   1006C   10280   1055R   13 NOV   1436.2   1.3   35730   358   1007   1008   1008   1008   10528   1055R   15 NOV   1436.2   1.3   35730   358   1008   10528	1		16243	USSR		706.2	63.1	39102	677		
10.05			16285	USSR	į.	91.9	72.9	395	338		
10.05   1.05	ŀ		16289	USSR	1	94.0	72.8	562	382		
10.77   RADIUGA 17   16.250   USSR   15 NIV   K456.2   1.5   36.77   36.77   10.75   10.57   10.57   10.58   15 NIV   K456.2   1.5   36.77	- 1	- 1	16290	USSR	- 1	- 1 '	72.9	389	344		
107F   16255   USSR   15 NOV   646.1   4.1   33607   33607   1038   10262   USSR   22 NOV   91.7   82.5   664   10389   10262   USSR   22 NOV   91.7   82.5   664   10389   10262   USSR   22 NOV   1436.1   2.9   35601   356   10362   USSR   22 NOV   1436.1   2.9   35601   356   10362   USSR   22 NOV   1436.2   0.1   35801   356   USSR   22 NOV   1436.2   0.1   35801   356   USSR   USSR   23 NOV   651.0   25.6   346.6   USSR   USSR   USSR   23 NOV   651.0   25.6   346.6   USSR   USSR   24 NOV   651.0   25.6   346.6   USSR   USSR   USSR   24 NOV   651.0   25.6   346.6   USSR   USSR   24 NOV   651.0   25.6   346.6   USSR   USSR   24 NOV   651.0   25.6   346.6   USSR   USSR   USSR   24 NOV   651.0   25.6   346.6   USSR   USSR   USSR   24 NOV   651.0   25.6   346.6   USSR   USSR   24 NOV   651.0   25.6   346.6   USSR   USSR   24 NOV   651.0   25.6   346.6   USSR   USSR   USSR   24 NOV   651.0   25.6   346.6   USSR   USSR   24 NOV   651.0   25.6   346.6   USSR   USSR   USSR   24 NOV   651.0   25.6   346.6   USSR   USSR   USSR   24 NOV   651.0   25.6   346.6   USSR   US			16250	USSR		1436.2	1.3	35790	35788		
1084   COSMOS 1703   16262   USSR   22 NDV   97.7   82.5   664   1084   1085   1026   USSR   22 NDV   97.7   82.5   664   1084   1085   1027   USSR   22 NDV   97.7   82.5   664   1086   1086   1087   1087   22 NDV   136.2   2.0.1   35801   35   1086   1087   1087   1087   1087   28 NDV   136.2   2.0.1   35801   35   1086   1087	l		16255	USSR	ı	648.1	47.1	36607	251		
100   100	77	COSMOS 1703	16262	USSR	1	97.7	82.5	9999	630		
1096   MINELLUS B   16274   MEXILU   27 NOV   1436.2   0.1   35790.1   357				USSR		97.6	82.5	5662	628		4
1090 SATCOM KU2   16276   US   28 MDV   1436.2   O.1   35801   35				MEXICO		1436.1	2.9	35801	35786		354
10.9F	i	SATCOM KUZ		Sn			0.1	35801	35774		335
109H				HEXICO	1	651.0	25.6	36666	343		
100	- 1			MUSTRI US	1	626.6	25.9	35392	364		
1108	- 1	COSMOS 1704	16291	355U		104.8	82.9	1007	196		
III			16292	USSR		104.6 90.9	72.9	328 328	308 308		
111   111			16354	USSR		90.9	73.0	329	304		
111K   16359 USSR 3 DEC 91.1 72.9 344     111K   16371 USSR 3 DEC 92.0 72.9 405     111K   16371 USSR 3 DEC 91.7 72.9 379     111K   16372 USSR 3 DEC 91.7 72.9 379     112A CDSMOS 1706	1		16356	USSR		92.1	72.9	408 808	349		
1111   16370   USSR   3 DEC   91.7   72.9   379   1114   16371   USSR   3 DEC   91.7   72.9   379   379   379   379   379   370	i		16359	USSR	l	91.1	72.9	344	309		
112A   COSMOS 1706   16372   USSR   11 DEC   89.4   67.1   321   321   112A   COSMOS 1706   16326   USSR   12 DEC   87.6   82.5   659   138   138   1432   USSR   12 DEC   97.6   82.5   659   144   16329   US   13 DEC   95.5   37.1   772   16329   USSR   13 DEC   95.5   37.1   772   144   16431   USSR   13 DEC   99.6   82.3   292   1156   16431   USSR   13 DEC   89.6   82.3   246   1156   16432   USSR   13 DEC   90.2   82.3   414   16432   USSR   13 DEC   90.2   82.3   414   16432   USSR   13 DEC   90.2   82.3   1000   16369   USSR   13 DEC   104.8   82.9   1000   16369   USSR   24 DEC   735.7   62.9   40758   1176   16395   USSR   24 DEC   735.7   62.9   40758   1176   16400   USSR   24 DEC   90.8   62.8   427   1176   16402   USSR   24 DEC   90.6   62.8   451   1176   16402   USSR   24 DEC   90.6   62.8   408   408   1176   16402   USSR   24 DEC   90.6   62.8   40			16371	USSR	j	91.7	72.9	379	337		
112A CUSMUS 1707   16326 USSR   12 DEC   97.6   82.5   662     113B		- 1	16372	USSR	- 1	91.6	12.9	359	171		
1138	- 1	- 1	16326	ASSI	- 1	97.7	82.5	662	630		
1146     16329     US     13 DEC     95.5     37.1     772       1146     16427     USSR     13 DEC     95.5     37.1     774       115E     16427     USSR     13 DEC     89.6     82.3     259       115G     16431     USSR     13 DEC     89.6     82.3     246       115H     16432     USSR     13 DEC     80.2     82.3     414       115A     COSMOS 1709     16368     USSR     19 DEC     104.8     82.9     1009       116A     L636     USSR     19 DEC     104.8     82.9     1009       117A     MOLNIYA 3-27     16399     USSR     24 DEC     735.7     62.9     40758       117B     L6394     USSR     24 DEC     90.8     62.9     427       117C     16400     USSR     24 DEC     90.8     62.9     478       117C     16401     USSR     24 DEC     91.4     62.9     478       117C     16401     USSR     24 DEC     91.4     62.8     451       117C     16401     USSR     24 DEC     91.4     62.8     408       117C     16401     USSR     24 DEC     91.4     62.8     408<			16327	USSR		97.6	82.5	659 776	630		
115E	1		16329	sn:	ı	95.5	37.1	772	314		
1156	i		16427	USSR		89.6	82.3	259	246		
1154   COSMOS 1709   16433   USSR   13 DEC   88.9   82.3   226     1164   COSMOS 1709   16368   USSR   19 DEC   104.8   82.9   1009     1168   USSR   19 DEC   104.7   83.0   1000     1174   MOLNIYA 3-27   16393   USSR   24 DEC   735.7   62.9   40758     1176   16436   USSR   24 DEC   90.8   62.8   478     1177   16401   USSR   24 DEC   91.4   62.8   478     1176   16401   USSR   24 DEC   91.2   62.8   451     1177   16401   USSR   24 DEC   91.2   62.8   40605     1176   16401   USSR   24 DEC   90.6   62.8   408     1177   USSR   24 DEC   90.6   62.8     1177   USSR   90.6   90.6   90.6     1177   USSR   90.6   90.6     1178   90.6   90.6   90.6     1178   90.6   90.6   90.6     1178   90.6   90.6   90.6     1178   90.6   90.6     1178   90.6   90.6     1178   90.6   90.6     1178   90.6   90.6     1178   90.6   90.6     1178   90.6   90.6     1178   90.6   90.6     1178   90.6   90.6     1178   90.6   90.6     1178   90.6   90.6     1178   90.6   90.6     1178   90.6   90.6     1178   90.6   90.6     1178   90.6   90.6     1178   90.6   90.6     1178   90.6   90.6     1178   90.6	1.		16432	USSR	1	90.2	82.3	414	247		
110A   CUSTAGO   150A	- 1		16433	9550	- 1	104.8	82.3	1009	959		
117A MOLNIYA 3-27			16369	USSR	- 1	104.7	83.0	1000	956		
117C   16395 USSR 24 DEC 90.8 62.8 427   117D   16400 USSR 24 DEC 91.4 62.8 478   117E   16401 USSR 24 DEC 91.2 62.8 451   117E   16402 USSR 24 DEC 732.7 62.8 40605   117E   16402 USSR 24 DEC 732.7 62.8 408		3-5	16393	USSR	•	735.7	62.9	40758	477		
1170 1176 1177 1176 1176 1177 1176 1177 1			16395		l .	90.8	62.8	427	202		
117F 117F 16402 USSR 24 DEC 732.7 62.8 40605	- 1		16400	155k	1	0 10	8.64	451	212		
11.76 164.10 1155K 24 DEC 90.6 62.8 408			16401	USSR	- 1	732.7	62.8	40605	480		
OF STATE OF	l		16410	USSK	24 DEC	9.06	62.8	408	199		

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LNIER					•		י י י	1	10,550	
DESIGNATION	NAME	NUMBER	NUMBER SOURCE	LAUNCH	MINUTES	NATION	XI.	XX.	FREQ. (MHZ)	NOTES
1985 LAUNCHES (CONT.)	S (CONT.)									
1985 117J		16412	USSR	24 DEC	90.6	62.8	417	187		
+	COSMOS 1710	16.20	822	34 050	675	4	19145	19109		
1188	COSMUS 1711	16397	USSR	24 DEC	668.2	64.8	19137	18742		
###	608M05 1712	16398	USSR-	-24 DEC	676.3	64.8		66161		
118F		16404	USSR	24 DEC	675.5	64.8	19134	19115		
1194	MC TC OR 2-13	16408	- <del>1888</del> -	26 DEC	104.0	82.5		936		
1198		16409	USSR	26 DEC	104.0	82.5	956	935		
†***	COSMOS 1713	16429	HS SR	27 DEC	86	62 8	395	216		
1985 1208		16430	USSR	27 DEC	90.3	62.8	367	210		
1985 1214	COSMOS 1714	16434	#55B	28 DEC	94.5	21.0	826	161		
1985 1218	1	16435	USSR	28 DEC	93.2	71.0	699	162		
1985 1216-		16436	- <del>8880</del>	28 066	92.0	-	567	157		
1985 1210		16437	USSR	28 DEC	97.6	71.0	850	**1		
1985 1216		16438	8550	38 960	83	-	84.7	433		
1985 121F		16439	USSR	28 DEC	97.4	71.0	848	119		
1385 1216		16440	HEED	28 050	87.3	71 0	949	408		

1 20 277	26#	23	21	20*	
HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED HITH 1978 68 OBJECTS OF THIS SERIES THAT HAVE DECAYED CAN BE F OBJECTS LIST IN THE DECEMBER 31 END-OF-THE-YEAR SUMMAR TUATION REPORT. HIS SERIES THAT HAVE DECAYED CAN BE FOUND IN THE DECAY IN THE DECEMBER 31 END-OF-THE-YEAR SUMMARY SATELLITE—		ORT.  TS HAVE BEEN IDENTIFIED AS HAVING BEEN	ORT.  ORT.  ORT.  OF THIS SERIES THAT HAVE DECAYED CAN BE FOUND IN THE DECAY  LIST IN THE DECEMBER 31 END-OF-THE-YEAR SUMMARY SATELLITE-  ORT.  OF THIS SERIES THAT HAVE DECAYED CAN BE FOUND IN THE DECAY  OF THIS SERIES THAT HAVE DECAYED CAN BE FOUND IN THE DECAY	SUMMARY SATELLITE SITUATION REPORT.  199 OBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED HITH 1975 OCAN- 199 OBJECTS OF THIS SERIES THAT HAVE DECAYED CAN BE FOUND IN THE DECAYED  OBJECTS LIST IN THE DECEMBER 31 END-OF-THE-YEAR SUMMARY SATELLITE SITUA- TION REPORT.  56 OBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1976 O67A- OBJECTS OF THIS SERIES THAT HAVE DECAYED CAN BE FOUND IN THE DECAYED  OBJECTS IN THE DECEMBER 31 END-OF-THE-YEAR SUMMARY SATELLITE SITUA- OBJECTS IN THE DECEMBER 31 END-OF-THE-YEAR SUMMARY SATELLITE SITUA- OBJECTS OF THIS SERIES THAT HAVE DECAYED CAN BE FOUND IN THE DECAYED	DBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1972 058A.  DBJECTS OF THIS SERIES THAT HAVE DECAYED CAN BE FOUND IN THE DECAYED  OBJECTS LIST IN THE DECEMBER 31 END-OF-THE-YEAR SUMMARY SATELLITE SITUA  TION REPORT.  105 UBJECTS HAVE DEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1973 086A  DBJECTS OF THIS SERIES THAT HAVE DECAYED CAN. BE FOUND IN THE DECAYED  OBJECTS LIST IN THE DECEMBER 31 END-OF-THE-YEAR SUMMARY SATELLITE SITUA  TION REPORT.  1100 REPORT.  1100 BJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1974 089A  1100 BJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1974 089A  1100 BJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1974 089A  1100 BJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1974 089A  1100 BJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1974 089A  1100 BJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1974 089A  1100 BJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1974 089A  1100 BJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1974 089A  1100 BJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1974 089A

## ORIGINAL PAGE 19 OF POOR QUALITY

*67	69 DEJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED HITH 1980 0894.
	UBJECTS UP THE DECEMBER 31 END-DE-THE-YEAR SUMMATY SATELLITE SITUA-
30*	TION REPORTS67 UBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED HITH 1981 028A.
	DBJECTS OF THIS SERIES THAT HAVE DECAYED CAN BE FOUND IN THE DECAYED  OBJECTS LIST IN THE DECEMBER 31 END-DE-THE-YEAR SUMMARY SATELLITE SITUA-
	TION REPORT.
31%	248 OBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED MITH 1981 053A
	OBJECTS OF THIS SERIES THAT HAVE DECAYED CAN BE FOUND IN THE DECAYED
	TION REPORT.
32*	31 OBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED MITH 1982 1154.
	OBJECTS OF THIS SERIES THAT HAVE DECAYED CAN BE FOUND IN THE DECAYED
	DBJECTS LIST IN THE DECEMBER 31 END-DE-THE-YEAR SUMMARY SATELLITE SITUA-
	TION REPORT.
33*	27 OBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1983 0914.
	UBJECTS OF THIS SERIES THAT HAVE DECAYED CAN BE FOUND IN THE DECAYED
	UBJECTS LIST IN THE DECEMBER 31 END-DE-THE-YEAR SUMMARY SAIELLITE SITUA
	TION REPORT.
35*	DEPLOYED FROM SPACE TRANSPORTATION VEHICLE.
36*	40 DBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1983 044A.
	OBJECTS IN THIS SERIES THAT HAVE DECAYED CAN BE FOUND IN THE DECAYED
	OBJECTS LIST IN THE DECEMBER 31 END-OF-THE-YEAR SUMMARY SATELLITE SITUA-
274	134 MO ICCTE DAVE DEEN TOCHTICIED AS DAVING DEEN LAINCHED HITH 1070 0174.
110	DRJECTS IN THIS SERIES THAT HAVE DECAYED CAN BE EDUND IN THE DECAYED.
	UBJECTS LIST IN THE DECEMBER 31 END-OF-THE-YEAR SUMMARY SATELLITE SITUA-
100	HETH COLOURS - MODE OFFICE ACTION NOTICE
184	27 UBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED MITH 1984 1044. DRIECTS IN THIS SERIES THAT HAVE DECAYED CAN BE EDUND IN THE DECAYED.
	OBJECTS LIST IN THE DECEMBER 31 END-OF-THE-YEAR SUMMARY SATELLITE
ZZ	ND NATIONAL NAME.

FOUTNOIES (CONI)

	OT AVAILABLE	ELEMENTS NOT		-	USSR	16407		
	T AVAILABLE	PERMENTS NOT	NITTAL S	24 DEC	USSA	16406		1985 1186 1985 1186
	1	7	7	- 1	1880	16403		- 1
		S	1. 1		USSR	16399		
131	158	82.3	87.4	13 DEC	USSR	16332		١.
253	268	82.3	89.7	1	USSR	16331		1
358	421	72 <b>.</b> 8	92.4	3 DEC	USSR	16358		1111 5861
193	346	72.9	89.9	3 DEC	USSR	16297		
354	412	72.9	92.2	1		16296	COSMOS 1705	
361	370		91.9	27 NOV	211	16273	STS AIR	1985 109A
190	598	62.9	92 <b>.</b> 5		USSR	16237		
1	***	₹.	92.7		1888	16226		
217	<b>461</b>		91.3		USSR	16225		1985 103F
209	310	67.1	89.2	25 DCT	USSR	16231	COSMOS 1699	1985 101A
195	581	62.9	92+3	- 1	USSR	16185		1985 0986
224	268	•	89.4		USSR	16228		
337	A00	72.9	93.0	19 SEP	LISSE	16136		1985 0856
638	980	•	100.0		HSS1	16219		
239	252	65.0	89.4	_	USSR	16192		
240	252	4	89.4	1	USSR	16196		
354	358	•	91.7		USSR	16245		
157	360	•	9.7	ł	HSSP HSSP	16230		
405	616		94.8	24 FEB	SO	16148		
252	506	97.8	92-1	-24 FEB		16131		1979 61745-
- KM-	**	NATION	MINUTES	LAUNGH	SOURCE	NUMBER	NAME	DESIGNATION
יות ביים מיים	10000							

-INITIAL ELEMENTS OF UBJECTS WHICH WERE LAUNCHED/CAIALOGED\_AND\_DECAXED WITHIN THE REPORTING PERIOD

NOTES

INTER-					
NATIONAL DESIGNATION	NAME	CATALOG	SOURCE	LAUNCH	DECAY
			:		
1963 047E		669	Si	1	¥ ;
		1088	: c	16 FEB	10 JUL 85
•	EXPLURER 32	2183	31		
		4456	1 W	30 35 7	
1	1	0.000	00311	ı	2
1973 097A	MULNIYA 1-26	6958	0.55K		Z X
1975 004HC		9968	Sn	1	
	MOLNIYA 1-34	8762	IISSP		MAY
ľ		11207	USSR		İ
		10185	SII	10 41	23 JUN 85
	CORSA B	11272	JAPAN	21 FEB	APR
	- 1	16037		24 EEB	8 OCT 85
		16043	Sn	_	DEC
1379 017AR		16130	Sit	24 FEB	- 1
		16131	Sn	24 FEB	15 DEC 85
- 1		16132	SU	4	24 OCT 85
		16148	SD	24 FEB	20 DEC 85
- 1		13320	USSR	YON A	3 SEP 85
		13339	UŠSR	AON +	17 AUG 85
		14351	dssii	AON V	- 1
		14352	USSR	AON &	15 APR 85
		14832	85511	A MOV	- 1
		14833	USSR	AON +	9 SEP 85
		13192	assn	20 MAR	15 JUN 85
		14626	USSR	NOC ◆	10 MAY 85
ı		13043	assii		ğ
1982 033DM		15281	USSR		
1982 U33DN		15282	USSR	1	MALE
		15283	2000	19 APR	14 FEB 85
1		20541	1000	ı	1
		15307	300	19 APR	
1	***************************************	7184	3550	1	3
		15314	X 800 5	19 APR 10 ADB	2 U
1		16344	OSSII	ı	NAL
		15367	S S S S S S S S S S S S S S S S S S S		MAR
1002 03354		15368	USSR		
		15401	IISSE		MAL
1007 03357		15420	USSR	19 APR	24 JAN 85
		15524	USSE	19 APR	17 MAR 85
l		15525	USSR	19 APR	10 APR 85
		15526	USSR	19 APR	8 050 85
		15527	USSR		MAR
		15532	usse	19 APR	15 EEB 85
		15533	USSR		MAR
- 1		15933	USSR	- 1	e E E
		15934	USSR	19 APR	24 AUG 85
		15937	USSR	- 1	PHC
		15939	USSR	19 APR	25 SEP 85

- OBJECTS DECATED WITHIN THE REPORTING PERIOD

1984 1036 1984 1046 1984 1046 1984 1046 1984 1046 1984 1046 1984 1126 1984 1126 1984 1174 1984 1174 1984 1174 1984 1216 1984 1216 1984 1214 1984 1214	NUMBER 15364 15564 15565 15566 15567	SOURCE	LAUNCH	DECAY	NOTES
1036 1040 1046 1046 1126 1126 1126 1126 1177 1177 1177 117	15364 15564 15565 15566 15567	USSR		7	
104C 104D 104E 104E 104E 112B 112B 112C 117C 117A	15564 15565 15566 15567			- 1	
1040 104E 104E 112B 112B 112C 112C 117A 117A 117A 117A 117A 117A 117A 117	15565 15566 15567	USSR		NOV	
104E 104E 112B 112B 112C 112C 117A 117A 117A 117A 117A 117A 117A 117	15566	USSR	- 1	- 1	
1126 1126 1126 1126 1136 1170 1171 1174 1174 1174 1174 1174 1174	15567	USSR		DEC	
1128 1120 1126 1126 1136 1170 1171 1174 1174 1174 1176 1216 1217 1217 1217 1217 1217 1217		USSR	- 1		
11.26 11.26 11.26 11.70 11.74 11.74 11.74 11.74 12.16 12.16 12.17 12.18 12.18 12.18 12.18 12.18 12.18 12.18 12.18 12.18 12.18	15502	USSR	31 OCT	28 MAK 85	
1126 1176 1177 1174 1174 1174 1174 1174 117	15507	USSR	l l		
1126 1176 1177 1174 1174 1174 1174 1276 1216 1217 1217 1217 1217 1217 1217	15508	USSR		- 1	
1176 1174 1174 1174 1174 1174 1174 1174	1551)	USSR	31 OCT	MAR	
117F 117J 117J 117A 117A 117A 127A 121F 121F 121A 121A 121A 121A 121A 121	15408	USSR	- 1		
1174 1174 1174 1174 COSMOS 1204 COSMOS 1204 1216 1214 1214 1216 1216 1216 1216 121	15410	USSR	14 NOV	1 MAT 85	
1174 1174 1174 COSMOS 1204 COSMOS 1215 1216 1214 1214 1216 1216 1246 1246	71 651	1550	1	Q V X	
1194 COSMOS 1204 COSMOS 1215 1216 1214 1214 1216 1216 1216 1246 1246	15415	ASSU ASSU		FFR	
12.14 COSMOS 12.16 12.14 12.14 12.14 12.18 12.18 12.18 12.40 12.40	15403	11558	21 NOV	_	
121F 121G 121H 121L 121K 121H 124G 124G	15406	85511	- 1	NAL	
	15457	USSR	29 NOV	APR	
	15458	USSR		5 JUL 85	
	15459	UŠSR			
	15460	USSR		AAX	
	15461	USSR		NYS	
	15462	USSR		NAL	
1.1	15463	USSR	29 NOV	NAD	
	15430	USSR	14 DEC	NA T	
	15431	USSR		ZY:	
l	15435	usse		4	
	15436	USSR	14 DEC	12 JAN 85	
124F	15437	10550		1	
125E VI DESCENT	15858	000K	15 DEC	NII	
3471	15856	85511		NOC	
128E VZ DESCENI	15857	USSR		N	
1	15455	SN	22 DEC	JAN	
	15466	JAPAN	- 1	- 1	
	15467	USSR	•	HAR	
1985 0028	15468	USSR	1	1	
1985 0048	15477	USSR	•	21 HAR 02	
00.46	15478	3331	74.	2	
	124/9	100 E	16 JAN	FFR	
- [	15.400	door	Ι .	AON	
	15500	NSSB NSSB	ı	3	
1995 COSE	15501	USSR	•	19 MAY 85	
	15509	USSR	16 JAN	•	
ł	15510	USSR	•	FEB	
	15485	USSR	- 1	N	
00.10	15486	USSR	•	•	
1985 008A COSMOS 1625	15492	YSSR		4	
CUBB	15493	USSR	23 JAN	24 JAN 83	
1985 JOA SIS 51C	15496	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			

DESTONATION NAME	NUMBER	Source	LAUNCH	DECAY	NOTES
1985-0124 CDSMDS-1628	15516	Hecp	A CCB		
0128	15515	USSR	6 FE8	21 FEB 85	
1985 0126	15570	USSR	4 FEB	12 SEP 95	
1	15573	USSR	h -	MA A	
	15579	USSR	T.		
1985 012N	15501	11558	7	- 1	
1985 0168	15575	COST	21 FEB	24 FEB 85	
0160	15576	USSR		FEB	
1985 ()178 CUSAUS 1838	1 A D D D D D D D D D D D D D D D D D D	92281	27 EEB	5 MAD 05	
1	15589	USSR		MAD:	
0198	15590	USSR	1 MAR	I A	
	15605	nssa.	1 XX8	ı	
	15610	CSSR	1 MAR	MAR	
1985 019F	15612	USSR	1 MAR	20 MAR 85	
- 1	15627	HSSN		MAR A	
1985 026A 605M05 1643	15636	CICA	25 HAR	18 DCT 85	
0268	15635	USSR	•	HAR.	
1	15637	USSR	3 APR	21 APR 85	
1985 0270	15639	USSR	3 APR	6 APR 85	10
	15640				
	15648	USSR	3 APR		<b>0</b> -1
	15651	USSR	3 APR	SEP	ЯO
- 1	15657	JSSR	3 APR	j,	ያስ
1985 028A STS 51D	15641	SO	12 APR	19 APR 85	ly:
029A COSA	15645	HSSH		APR	Ţ1.
1985 0238	15646	USSR	16 APR	10 MAY 85	<b>J</b> .
	15668	USSR	_	MAY	
1985 029F	15670 15670	USSR	16 APR	19 MAY 85	
- 1	15671	USSR		MAX	
	15654	USSR		A PR	
1985 032A COSMOS 1648	15659	USSR	25 APR	6 MAY 85	
6328	15660	HSSR	ŧ	APR	
	15672	USSR	25 APR	Y	
1985 032E	15674	USSR	25 APR	21 MAY 85	
- 1	15675	HSS8	- 1	X X	
1985 (338	01001	CUUX	AU ATR	7 TAP 700	

-UBJECTS DECAYED WITHIN THE REPORTING PERIOD-

19665   1966	NATIONAL DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
0.56.6         0.15.5         0.5         0.4         0.5         0.4         0.5         0.4         0.5         0.4         0.5         0			15663	assn	- 1	3	
16476   1647		•	15665	Sn		MAY	
15695   15695   15695   15587   15 417   29 417     15695   15745   15595   15587   15 417   29 417     15745   15745   15587   15 417   19 417     15745   15745   15587   15 417   19 417     15745   15745   15587   15 417   19 417     15745   15745   15587   15 417   19 417     15745   15745   15587   15 417   19 417     15745   15745   15587   15 417   19 417     15745   15745   15587   15 417   19 417     15746   15745   15587   15 417   19 417     15747   15745   15587   15 417   19 417     15748   15749   15587   15 417   19 417     15749   15749   15587   15 417   19 417     15749   15749   15587   15 417   19 417     15749   15749   15587   15 417   19 417     15749   15749   15587   15 417   19 417     15749   15749   15587   15 417   19 417     15749   15749   15587   15 417   19 417     15749   15749   15587   15 417   19 417     15749   15749   15587   15 417   19 417     15749   15587   15 417   19 417     15749   15587   15 417   19 417     15749   15587   15 417   19 417     15749   15587   15 417   19 417     15749   15587   15 417   19 417     15749   15587   15 417   19 417     15749   15587   15 417   19 417     15749   15587   15 417   19 417     15749   15 417   15 417     15749   15 417   15 417     15749   15 417   15 417     15749   15 417   15 417     15749   15 417   15 417     15749   15 417   15 417     15749   15 417   15 417     15749   15 417   15 417     15749   15 417   15 417     15749   15 417   15 417     15749   15 417   15 417     15749   15 417   15 417     15749   15 417   15 417     15 417   15 417   15 417     15 417   15 417   15 417     15 417   15 417   15 417     15 417   15 417   15 417     15 417   15 417   15 417     15 417   15 417   15 417     15 417   15 417   15 417     15 417   15 417   15 417     15 417   15 417   15 417     15 417   15 417   15 417     15 417   15 417   15 417     15 417   15 417   15 417     15 417   15 417   15 417     15 417   15 417   15 417     15 417   15 417   15 417     15 417   15 417   15 417     15 417   15 417   15 417     15			16170	USSR		님	
1966   1966   1966   1975			15694	USSR		¥ ;	
1909   1909	- 1		15695	XXX	1	>	
15.00   15.0			15696	2002		ALIG	
15.45   15.45   15.45   15.44   10.12   10.1	1		15744	USSR	1	3	
1546   15746   15574   1558   15 44Y   17 DEC   15644   15752   15584   15 44Y   17 DEC   15644   15752   15584   15 44Y   17 JUN   15752   15584   15 44Y   17 JUN   15752   15584   15 44Y   17 JUN   15752   15584   15 44Y   17 JUN   15752   15584   15 44Y   17 JUN   15752   15584   15 44Y   18 44			15745	USSR	ŧ	DCT	
15   14   15   15   14   15   14   15   14   14	ı		15746	USSR		DEC	
0.356K         15753         USSR         15 HAY         14 HAY         14 HAY         14 HAY         14 HAY         15 HAY         20 HAY         20 HAY         20 HAY         21 HAY         21 HAY         21 HAY         21 HAY         21 HAY         21 HAY         21 HAY         21 HAY         21 HAY         21 HAY         21 HAY         21 HAY         21 HAY         21 HAY         22 HAY         21 HAY         21 HAY         22 HAY         21 HAY         22 HAY         21 HAY         22 HAY         22 HAY         22 HAY         22 HAY         23 HAY         23 HAY         23 HAY         24 HAY         23 HAY         24 HAY         23 HAY         24 HAY         24 HAY         25 HAY         25 HAY         25 HAY         25 HAY         25 HAY         25 HAY         25 HAY         25 HAY         25 HAY         25 HAY         25 HAY <td></td> <td></td> <td>15747</td> <td>USSR</td> <td>- 1</td> <td></td> <td></td>			15747	USSR	- 1		
15.00   15.00   15.00   15.00   17.0	ı		15753	USSR		Š	
0.370         15700         USSR         17 MAY         20 MAY           0.336         0.370         USSR         17 MAY         20 MAY           0.336         0.370         USSR         22 MAY         5 JUN           0.336         1.5732         USSR         22 MAY         5 JUN           0.336         1.5732         USSR         22 MAY         2 JUN           0.336         1.5734         USSR         22 MAY         2 JUN           0.336         1.5734         USSR         22 MAY         2 JUN           0.336         1.5734         USSR         22 MAY         1 JUN           0.336         1.5734         USSR         22 MAY         1 JUN           0.336         1.5534         USSR         23 MAY         2 JUN           0.337         1.5334         USSR         23 MAY         2 JUN           0.336         1.5535         USSR         23 MAY         2 JUN           0.337         1.5534         USSR         23 MAY         2 JUN           0.339         1.5534         USSR         23 MAY         2 JUN           0.340         1.5534         1.5534         1.5534         1.544           <	ı		15765	USSR	- 1	3	
0.346         COSMOS 1653         15701         USSR         27 MAY         1 MAY         1 MAY           0.346         COSMOS 1653         15732         USSR         22 MAY         2 MAY			15700	USSR		HAY	
0.384         COSHOS 1653         15732         USSR         22 MAY         5 JUN           0.386         15733         USSR         22 MAY         5 JUN           0.386         15733         USSR         22 MAY         13 JUN           0.386         15734         USSR         22 MAY         13 JUN           0.386         15734         USSR         22 MAY         13 JUN           0.396         15734         USSR         22 MAY         13 JUN           0.396         15734         USSR         22 MAY         14 JUN           0.397         15854         USSR         23 MAY         2 JUN           0.396         15865         USSR         23 MAY         2 JUN           0.397         15865         USSR         23 MAY         2 JUN           0.396         15865         USSR         23 MAY         2 JUN           0.397         15865         USSR         23 MAY         2 JUN           0.398         15896         USSR         23 MAY         2 JUN           0.391         15896         USSR         23 MAY         2 JUN           0.394         15896         USSR         23 MAY         2 JUN	ŀ		15701	assn		X I	
0.386         15790         USSR         22 HAY         26 JUN           0.386         15791         USSR         22 HAY         1 JUN           0.386         15792         USSR         22 HAY         1 JUN           0.386         15794         USSR         22 HAY         1 JUN           0.396         15734         USSR         22 HAY         1 JUN           0.396         15734         USSR         23 HAY         2 JUN           0.397         15851         USSR         23 HAY         2 JUN           0.397         15852         USSR         23 HAY         2 JUN           0.397         15852         USSR         23 HAY         2 JUN           0.397         15852         USSR         23 HAY         2 JUN           0.397         15894         USSR         23 HAY         2 JUN           0.397         15895         USSR         2 HAY         2 JUN           0.398         15896         USSR         2 HAY         2 JUN           0.399         15896         USSR         2 HAY         2 JUN           0.390         15896         USSR         2 HAY         2 JUN           0.390			15732	USSR		<b>X</b>	
038C         15790         USSR         22 HAY         40 JUN           038E         15792         USSR         22 HAY         13 JUL           038E         15792         USSR         22 HAY         13 JUL           038E         15734         USSR         22 HAY         13 JUL           038A         15734         USSR         22 HAY         13 JUL           039B         15853         USSR         23 HAY         14 JUL           039C         15853         USSR         23 HAY         23 JUL           039C         15894         USSR         23 HAY         23 JUL           039C         15895         USSR         23 HAY         23 JUL           039C         15896         USSR         23 HAY         23 JUL           039C         15896         USSR         23 HAY         23 JUL           039C         15896         USSR         23 HAY         23 JUL           039C	- 1		15733	NSSE .			
0.336         15792         USSR         22 HAY         13 JUL           0.346         15793         USSR         22 HAY         18 JUL           0.346         15734         USSR         22 HAY         18 JUL           0.346         15735         USSR         23 HAY         7 AUG           0.346         15735         USSR         23 HAY         7 AUG           0.346         15853         USSR         23 HAY         27 JUN           0.346         15853         USSR         23 HAY         27 JUN           0.346         15853         USSR         23 HAY         27 JUN           0.346         15854         USSR         23 HAY         27 JUN           0.357         15865         USSR         23 HAY         27 JUN           0.340         15894         USSR         23 HAY         27 JUN           0.350         15895         USSR         23 HAY         27 JUN           0.341         15896         USSR         23 HAY         27 JUN           0.350         15896         USSR         23 HAY         27 JUN           0.340         15809         USSR         23 HAY         24 JUN			15790	USSR		2 2	
038E         15792         USSR         22 HAY         13 JULY           038E         15794         USSR         22 HAY         13 JULY           038G         15734         USSR         23 HAY         6 JULY           039G         15734         USSR         23 HAY         14 JULY           039G         15851         USSR         23 HAY         29 HAY           039G         15853         USSR         23 HAY         29 HAY           039G         15853         USSR         23 HAY         29 HAY           039G         15853         USSR         23 HAY         27 JULY           039G         15863         USSR         23 HAY         23 JULY           039G         15893         USSR         23 HAY         23 JULY           039G         15894         USSR         23 HAY         23 JULY           039G         15895         USSR         23 HAY         24 JULY           039G         15896         USSR         23 HAY         24 JULY           039G         15896         USSR         23 HAY         24 JULY           039G         15896         USSR         23 HAY         24 JULY           03	- 1		15791	3850	1		
0.346			15792	USSR		3	
0.386         15734         USSR         22 MAY         2 MAY         2 MAY           0.396         15735         USSR         23 MAY         29 MAY         29 MAY         29 MAY         29 MAY         29 MAY         29 MAY         20 MAY <t< td=""><td>ł</td><td></td><td>15793</td><td>25511</td><td></td><td>2</td><td></td></t<>	ł		15793	25511		2	
0.394         UUSBH         15735         USSR         23 MAY         29 MAY         14 MAY           0.396         1.5851         USSR         23 MAY         14 MAY         14 MAY         14 MAY         14 MAY         14 MAY         14 MAY         14 MAY         17 JUN			10/34	0.55g		201	
0.35 b         1585         105 b         106 b         107 b         107 b         107 b         107 b         107 b         107 b         107 b         107 b         107 b         107 b         107 b         107 b         107 b <th< td=""><td>1</td><td>LUSMUS 1654</td><td>16726</td><td>93311</td><td></td><td>μΑΥ</td><td></td></th<>	1	LUSMUS 1654	16726	93311		μΑΥ	
039D         15854         USSR         23 HAY         27 JUN         19 LUS           039F         15854         USSR         7 JUN         19 LUS           039F         15895         USSR         23 HAY         23 JUN           039G         15895         USSR         23 HAY         23 JUN           039H         15896         USSR         23 HAY         23 JUN           039H         15896         USSR         23 HAY         24 JUN           039H         15896         USSR         23 HAY         25 JUN           039H         15896         USSR         23 HAY         25 JUN           039H         15809         USSR         23 HAY         25 JUN           039H         15801         USSR         23 HAY         25 JUN           039F         15802         USSR         23 HAY         25 JUN           039F         15803         USSR         23 HAY         25 JUN           039F         15804         USSR         23 HAY         25 JUN           039F         15804         USSR         23 HAY         24 JUN           039F         15746         USSR         23 HAY         31 JUN			15851	ASSI		y V	
039F         1585         USSR         7 JUN         19 LUS           039F         15895         USSR         23 HAY         23 JUN           0394         15895         USSR         23 HAY         23 JUN           0394         USSR         23 HAY         23 JUN           0394         USSR         23 HAY         23 JUN           0394         USSR         23 HAY         24 JUN           0394         USSR         23 HAY         24 JUN           0394         USSR         23 HAY         25 JUN           0394         USSR         23 HAY         25 JUN           0396         USSR         23 HAY         25 JUN           0397         USSR         23 HAY         27 JUN           0398         USSR         23 HAY         27 JUN           0397         USSR         23 HAY         27 JUN           0397         USSR         23 HAY         27 JUN           0398         USSR         23 HAY         23 JUN           0397         USSR         23 HAY         23 JUN           0398         USSR         23 HAY         23 JUN           0408         USSR         23 HAY         2	1		15853	USSR		S	
039F         15855         USSR         7 JUN         7 JUN           039C         15893         USSR         23 HAY         23 JUN           039H         15895         USSR         23 HAY         23 JUN           039H         15896         USSR         23 HAY         24 JUN           039K         15807         USSR         23 HAY         24 JUN           039M         15809         USSR         23 HAY         25 JUN           039M         15809         USSR         23 HAY         25 JUN           039M         15800         USSR         23 HAY         25 JUN           039F         15900         USSR         23 HAY         25 JUN           039F         15900         USSR         23 HAY         25 JUN           039F         15900         USSR         23 HAY         27 JUN           039F         15900         USSR         23 HAY         27 JUN           039F         15900         USSR         23 HAY         27 JUN           039F         15730         USSR         23 HAY         27 JUN           040B         15739         USSR         29 HAY         1 JUN           040B			15854	assn		9	
15893         USSR         23 MAY         23 JUN           039H         15894         USSR         23 MAY         23 JUN           039K         15896         USSR         23 MAY         24 JUN           039K         15896         USSR         23 MAY         24 JUN           039K         15898         USSR         23 MAY         25 JUN           039K         15800         USSR         23 MAY         25 JUN           039K         15900         USSR         23 MAY         29 JUN           039T         15900         USSR         23 MAY         29 JUN           039T         15900         USSR         23 MAY         29 JUN           040B         15739         USSR         29 MAY         4 JUN           040B         15749         USSR         29 MAY         1 JUN           040C         15749         USSR         29 MAY         21 MAY           044E         15749			15855	USSR		i i	
039H         USSR         23 HAY         23 JUN           039L         15895         USSR         23 HAY         23 JUN           039K         15896         USSR         23 HAY         24 JUN           039H         15897         USSR         23 HAY         25 JUN           039H         15898         USSR         23 HAY         25 JUN           039H         15800         USSR         23 HAY         27 JUN           039H         15900         USSR         23 HAY         27 JUN           039F         15901         USSR         23 HAY         27 JUN           039F         15902         USSR         23 HAY         28 JUN           039F         15903         USSR         23 HAY         28 JUN           039F         15904         USSR         23 HAY         4 JUL           040B         15749         USSR         29 HAY         4 JUL           040B         15749         USSR         29 HAY         1 JUN           040B         15749         USSR         29 HAY         1 JUN           040B         15749         USSR         29 HAY         1 JUN           040B         15770			15893	USSR	- 1	N	
0391         USSR         23 HAY         24 JUN           039K         15896         USSR         23 HAY         24 JUN           039K         15896         USSR         23 HAY         24 JUN           039K         15896         USSR         23 HAY         25 JUN           039K         15800         USSR         23 HAY         25 JUN           039K         15901         USSR         23 HAY         27 JUN           039K         15902         USSR         23 HAY         27 JUN           039K         15904         USSR         23 HAY         27 JUN           039K         15904         USSR         23 HAY         29 JUN           039U         USSR         23 HAY         29 JUN           040B         USSR         23 HAY         30 JUN           040B         15740         USSR         29 HAY         4 JUL           040B         15740         USSR         29 HAY         31 JUN           040C         15740         USSR         29 HAY         31 JUN           042B         15740         USSR         29 HAY         31 JUN           042B         15770         USSR         30 HAY			15894	USSR		Z S	
0.99K         USSR         2.9 HAY         2.4 JUN           0.99L         15892         USSR         2.3 HAY         2.4 JUN           0.39H         15899         USSR         2.3 HAY         2.5 JUN           0.39h         15899         USSR         2.3 HAY         2.5 JUN           0.39h         15900         USSR         2.3 HAY         2.7 JUN           0.39G         USSR         2.3 HAY         2.9 JUN           0.39G         USSR         2.3 HAY         2.9 JUN           0.40G         USSR         2.3 HAY         2.9 JUN           0.40G         USSR         2.9 HAY         2.9 JUN           0.40G         USSR         2.9 HAY         2.9 JUN           0.40G         USSR         2.9 HAY         2.9 JUN           0.40G         USSR         2.9 HAY         2.1 JUN           0.40G         USSR         2.9 HAY         2.1 JUN	- 1		15895	USSR	- 1		
0.39H         USSR         23 HAY         25 JUN           0.39H         USSR         23 HAY         25 JUN           0.39H         15898         USSR         23 HAY         25 JUN           0.39P         USSR         23 HAY         27 JUN           0.39C         USSR         23 HAY         27 JUN           0.39T         USSR         23 HAY         29 JUN           0.39T         USSR         23 HAY         30 JUN           0.39T         USSR         23 HAY         30 JUN           0.40B         USSR         23 HAY         30 JUN           0.40B         USSR         29 HAY         4 JUL           0.40B         USSR         29 HAY         4 JUL           0.40B         USSR         29 HAY         1 JUN           0.40B         USSR         29 HAY         3 JUN           0.42B         USSR         29 HAY         3 JUN			15896	USSR			
039H         USSR         23 HAY         25 JUN           039N         15899         USSR         23 HAY         25 JUN           039P         15900         USSR         23 HAY         27 JUN           039R         15902         USSR         23 HAY         27 JUN           039R         15902         USSR         23 HAY         27 JUN           039F         15902         USSR         23 HAY         27 JUN           039F         15902         USSR         23 HAY         27 JUN           039F         15902         USSR         23 HAY         26 JUN           039U         USSR         23 HAY         27 JUN           040B         15739         USSR         29 HAY         4 JUN           040B         15749         USSR         29 HAY         17 JUN           040C         15749         USSR         29 HAY         3 JUN           040C         15750         USSR         29 HAY         3 JUN           042B         15770         USSR         29 HAY         3 JUN           042B         15770         USSR         20 HAY         3 JUN           043A         15804         USSR         <	- 1		15897	USSB	1		
0.39N         USSR         23 MAY         25 JUN           0.39P         15900         USSR         23 MAY         27 JUN           0.39P         15901         USSR         23 MAY         27 JUN           0.39S         15902         USSR         23 MAY         29 JUN           0.39S         15904         USSR         23 MAY         29 JUN           0.39U         15905         USSR         23 MAY         4 JUL           0.39U         USSR         29 MAY         4 JUL           0.40E         15749         USSR         29 MAY         31 MAY           0.40E         15770         USSR         29 MAY         31 MAY           0.42E         29 MAY         31 MAY         31 MAY           0.43A         50 MAY         50 MAY         50 MAY           0.43A         15770         USSR         6 JUN         26 SEP			15898	USSK		5 =	
039P         159UU         USSR         23 HAY         27 JUN           039R         15902         USSR         23 HAY         27 JUN           039S         15902         USSR         23 HAY         28 JUN           039S         15903         USSR         23 HAY         29 JUN           039U         USSR         23 HAY         29 JUN           040B         1576         USSR         29 HAY         4 JUL           040B         15749         USSR         29 HAY         31 UN           040B         15749         USSR         29 HAY         31 MAY           040B         15749         USSR         29 HAY         31 UN           040B         15749         USSR         29 HAY         31 UN           040B         15749         USSR         29 HAY         31 UN           040B         15770         USSR         29 HAY         31 UN           042B         15770         USSR         30 HAY         31 NAY           042B         15771         USSR         6 JUN         26 SEP	- 1		8684	10.50	1	2	
0.39R         23 HAY         28 JUN           0.39R         23 HAY         29 JUN           0.39S         23 HAY         29 JUN           0.39T         15904         USSR         23 HAY         29 JUN           0.39U         USSR         23 HAY         30 JUN           0.40U         USSR         29 HAY         4 JUL           0.40U         USSR         29 HAY         4 JUL           0.40U         USSR         29 HAY         31 HAY           0.40U         USSR         29 HAY         31 UN           0.40U         USSR         29 HAY         31 UN           0.40U         USSR         29 HAY         31 UN           0.40U         USSR         30 HAY         31 UN           0.43L         SOYUZ         15770         USSR         30 HAY         31 MAY           0.43L         SOYUZ         15771         USSR         6 JUN         26 SEP			15900	XCCU			
0395K         15903         USSR         23 MAY         29 IUM           0391         15904         USSR         23 MAY         29 IUM           0391         15905         USSR         29 MAY         4 JUL           0406         0406         USSR         29 MAY         4 JUL           0406         15746         USSR         29 MAY         17 JUN           0406         15769         USSR         29 MAY         31 MAY           0406         15750         USSR         29 MAY         1 JUN           15795         USSR         29 MAY         3 JUN           0428         15770         USSR         29 MAY         3 JUN           0428         15770         USSR         30 MAY         31 MAY           0428         15771         USSR         50 MAY         31 MAY           043A         15771         USSR         6 JUN         26 SEP			15002	IIS CR		N	
039T         LSSR         23 HAY         30 JUN           039U         USSR         23 HAY         4 JUL           040B         15739         USSR         29 HAY         4 JUL           040B         15740         USSR         29 HAY         17 JUN           040C         15748         USSR         29 HAY         17 JUN           040C         15750         USSR         29 HAY         1 JUN           040C         USSR         29 HAY         1 JUN           1579G         USSR         29 HAY         23 JUN           042B         USSR         29 HAY         3 JUN           042B         USSR         30 HAY         3 JUN           042B         15770         USSR         30 HAY         31 HAY           042B         15771         USSR         50 HAY         31 HAY           042B         50 HAY         50 HAY         31 HAY			20461	11558	1	4	
039U         USSR         23 MAY         6 JUL           040B         15739         USSR         29 MAY         4 JUL           040B         15749         USSR         29 MAY         25 JUN           040C         USSR         29 MAY         17 JUN           040C         USSR         29 MAY         17 JUN           040C         USSR         29 MAY         1 JUN           040C         USSR         29 MAY         1 JUN           1579S         USSR         29 MAY         23 JUN           042B         USSR         29 MAY         3 JUN           042B         USSR         30 MAY         3 JUN           042B         USSR         30 MAY         31 MAY           043A         15770         USSR         50 MAY         31 MAY           043A         15771         USSR         6 JUN         26 SEP	•		15904	USSR		NOC	
0430         USSR         29 HAY         4 JUL           0430         USSR         29 HAY         25 JUN           0430         USSR         29 HAY         17 JUN           0430         USSR         29 HAY         17 JUN           0430         USSR         29 HAY         1 JUN           0400         USSR         29 HAY         1 JUN           0400         USSR         29 HAY         1 JUN           0420         USSR         29 HAY         3 JUN           0420         USSR         30 HAY         3 JUN           0420         USSR         30 HAY         3 JUN           0420         USSR         50 HAY         3 JUN           0434         SOYUZ T-13         15804         USSR         6 JUN         26 SEP			15905	11558	- 1	1	
04.0C         15740         USSR         29 MAY         25 JUN           04.0C         15748         USSR         29 MAY         17 JUN           04.0C         15749         USSR         29 MAY         17 JUN           04.0C         USSR         29 MAY         1 JUN           04.0C         USSR         29 MAY         3 JUN           04.2C         USSR         29 MAY         3 JUN           04.2C         USSR         30 MAY         3 JUN           04.2C         USSR         30 MAY         3 JUN           04.2C         15770         USSR         30 MAY         3 JUN           04.3A         50 MAY         3 JUN         26 SEP	1		15739	USSR		J T	
043E         USSR         29 MAY         17 JUN           040E         USSR         29 MAY         31 MAY           040G         USSR         29 MAY         1 JUN           040G         USSR         29 MAY         1 JUN           042B         USSR         29 MAY         23 JUN           042C         USSR         30 MAY         3 JUN           042C         USSR         30 MAY         31 MAY           043A         15771         USSR         30 MAY         31 MAY           043A         15771         USSR         6 JUN         26 SEP			15740	USSR	- 1	NAT	
04.06         USSR         29 MAY         31 MAY           04.06         USSR         29 MAY         1 JUN           04.04         USSR         29 MAY         23 JUN           04.26         USSR         30 MAY         3 JUN           04.26         USSR         30 MAY         31 MAY           04.34         SDYUZ T-13         15804         USSR         6 JUN         26 SEP	ł		15748	USSR		N N N	
0406     USSR     29 MAY     1 JUN       0404     USSR     29 MAY     23 JUN       0426     USSR     30 MAY     3 JUN       0426     USSR     30 MAY     3 JUN       0427     USSR     30 MAY     31 MAY       043A     SOYUZ T-13     15804     USSR     6 JUN     26 SEP			15749	USSR	- 1	Ä	
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		USSR	15917	COCMBC 1447	
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	26 JUN	USSR	15886		1985 0546
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	Į	Sec. 2	15861	1	
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	21 JUN	USSR	15842		1985 053A
		USSR	15884		- 1
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	7 JUN	COUR	15045		1985 0446
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	7 JUN	USSR	15807		
1			15806	COSMOS 1657	- 1
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- OBJECTS DECAYED WITHIN THE REPORTING PERIOD

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NATIONAL Designation	NAME	CATALOG	SOURCE	LAUNCH	DECAY	NOTES
		10031	92211	15.811	3 SFP AS	
		16000	83311	15	1	
1985 050E		15722	USSB	- 1		
1		15924	USSR	_	AUG	
- 1		15926	USSR	- 1	S S	
		15927	USSR	15 JUL	31 JUL 85 2 Aug 85	
1985 060K	in the state of th	15910	USSR	17 JUL	AUG	
		15911	USSB	17 1111	- 1	
	CDSMDS 1669	15918	USSR	•		
	- 1	15919	USSR	-		
	STS 51F	15925	S	29 JUL 39 III	6 AUG 85	
	P0.P	15929	50	1	1	
1985 0648		16195	USSK	1 AUG	DEC	
1985 0654	CREMOS 1671	15931	USSR			
		15932	assn	2 AUG	- 1	
		15961	USSR	2 AUG	SEP	
1985 0650		15962	USSR	-		
		15964	USSR	2 AUG	3 SEP 85	
1		27031	95511		4 2	
1985 0656	CDSMIN 1672	15940	USSR	7 Aug	PIE	
1		15941	USSR	7 AUG	AUG	
- 1		15971	USSR	7 AUG	9114	
		15972	USSR	7 AUG	15 OCT 85	
- 1		15973	3550	7 110		
1985 067F		15974	USSK	7 AUG	1	
1985 067H		15976	USSR	7 AUG	AUG	
- 1	CDSM05 1673	15942	USSR	1	SE SE	
		15943	USSR		14 AUG 85	
1985 0680		15949	USSE		1	
		15947	X 00 1	A AUG	9 AUG 85	
1985 070C		15953	USSR	Ī	OCT	
		15954	USSR	- 1	27 SEP 85	
		15958	USSR	12 AUG	OCT	
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	COSMUS 1676	15959	S S S S S S S S S S S S S S S S S S S	16 AUG	14 UCI 85	
- 1		15960	USSK.	1	3 2	
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1985 0740		16192	USSR	- 1	9	
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- 1		16219	USSR	-	Š	
	STS 511	15992	SN		SEP	
- 1	COSMOS 1678	15997	USSR	- 1		
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- 1	16021	USSR	1	SEP 8	
1985 0775	16023	HSSB	29 AUG		
-	16024	USSR		SEP	
077J	16026	USSR	29 AUG	- 1	
1985 0788	16999	USSR	ነ ነው	8	
1	10000	LINGS	29 AUG	10 SED 85	
	16019	USSR	6 SEP	SEP	
	16059	USSR	16 SEP	- 1	
1985 081A SOYH7 T-14	16060	USSR	435 P	SEP	
8180	16052	HSSB.	17 860	20 SEP 95	
1985 0828	16055	USSR		SEP	
0836	16057	USSR		2	
	16126	USSR	19 SEP	24 OCT 85	
1985 084C	16066	USSR	24 SEP		
1985 085A COSMOS 1685	16088	ASSI NSSR	24 SEP		
1	16136	USSR		E #	
1985 085L	16162	USSR		7 NOV 85	
1985 0868	16096	HSSR	•	ŧ.	
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1	16114	USSR			80
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	16178	PRC	•	*	
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098C	16185	USSR		14 DEC 85	
1985 1018	16212 16138	USSR	25 OCT		
1985 1028	16200	USSR	i (fi	#	
1985 1033	16221	U557		# 5	
1787 1036	16222		28 OCT		

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NATIONAL		CATALOG			
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DE,CAY
1957 LÄUNCHE	ES				
ALPHA I		; <b>-</b>	USSR	+ OCT	
BETA 1	SPUTNIK 2	tu e	USSR	AON E	14 APR 58
1958 LAUNCHES	ES				
ALPHA I	EXPLORER 1	4	Sn	- f	1
DELTA I		7	USSR	15 MAY	3 DEC 58
- [	·		nssk		APR
EPSILON 1	SCORE 4	9	SS	26 JUL	OCT
FIA T	PIONEER 1	110	US US		32
1959 LAUNCHES	ES				1 1
ALPHA 3		5807	SH	17. FFR	22 NOV 82
BETA 1	DISCOVERER 1	13	Sn	1	HAR
DELTA 1	EXPLORER 6	15	US	- 1	JUL
EPSILUN 1	DISCOVERER 5	18	S	ł	SEP
ZETA 1	DISCOVERER 6	19	Sn	1	- 1
KAPPA 1	DISCOVERER 7	24	SO	7 NOV	NOV
XI 1		114	USSR	12 SEP	15 SEP 59
1960 LAUNCHE	ES				
BETA 3		101	SO	1 APR	PR
GAMMA 2	TRANSIT 18	31	SO	1	· · ·
	DISCOURBER 11	99	SO	13 APR	
	SPUTNIK 4	34	USSR	15 MAY	5 SEP 62
		35	USSR	•	
EPSILUN 3		36 37	USSR	15 MAY	15 OCT 65
		ىن د 80 (	USSR		DC 1
		40	USSR		24 SEP
6 NIJ 115d3		42	8551	15 MAY	SED - DCT 60

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DE SIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DĘCAY	NOTES
1960 LAUNCHES (CONT.	ES (CONT.)					
75.14.1	MI 0.85 2	43	US	24 MAY	FEB	
C 4117	1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1 9	US	24 MAY	H	
THETA	DISCOVERER 13	48	US	10 AUG	NO NO	
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10TA 1	ECHO 1	64	NS	12 AUG	MAY	
7 2 0 0 4 3			SII	18 446	SEP	
A A D D A	CAPSILIF	ANN	NS	18 AUG	AUG	# 60
L AMBOA 1	CONTRICT	55	USSR	19 AUG	9	<b>:</b>
AMBOA -		56	USSR	19 AUG	SEP	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	DISCOVERER 15	5.7	us	13 SEP	뎜	
	CAPSIII E	ANN	US	13 SEP	SEP	<b>*</b>
1 141	DISCOVERER 19	68	us	20 DEC	4	
X I X		69	US	3 NDV	FEB	
) <		105	us	AUN E	#B	
	DISCOVERER 17	61	SN	12 NOV	29 DEC 60	
CMICEON	TAPSILI F	MNA	SII	12 NOV	ğ	
2 10		99	Sn	23 NOV	SEP	
1 0 1 0	SPIITNIK A	65	USSR	1 DEC	끸	
DHO 2		99	IISSR	1 DEC	000	
C TOMP 1	DISCOVERER 18	67	SU	7 DEC	3	i
SIGMA 1	CAPSULE	NNA	Sn	7 DEC	10 DEC 60	<b>*</b>
1961 LAUNCHES	ES					
				241 - 10	21 OCT 73	

USSR	1961 LAUNCHES		72	SII	31 JAN	21 OCT 73
USSR 4 FEB 12-13 USSR 1 FEB 17-13 USSR 12 FEB 17-13 USSR 12 FEB 17-13 USSR 12 FEB 13-18 USSR 12 FEB 25 US 16 FEB 20 US 16 FEB 20 US 17 FEB 20 US 17 FEB 20 US 17 FEB 20 US 17 FEB 30 USSR 9 MAR 10 USSR 9 MAR 10 USSR 9 MAR 10 USSR 9 MAR 10 USSR 25 MAR 10 USSR 25 MAR 25 USSR 25 MAR 26	SAMOS 2		0/ 6/	US US	- 1	9 001 70
USSR         4 FEB         12-13           USSR         4 FEB         17           USSR         12 FEB         25           USSR         12 FEB         25           USSR         12 FEB         25           US         16 FEB         29           US         16 FEB         29           US         17 FEB         20           US         17 FEB         20           US         17 FEB         20           US         17 FEB         20           US         17 FEB         30           USSR         9 MAR         10           USSR         9 MAR         10           USSR         9 MAR         10           USSR         25 MAR         25           USSR         25 MAR         25           USSR         25 MAR         27	COUTAIN 7		7.1	USSR	4 FEB	
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USSR 12 FEB 18 USSR 12 FEB 13-18 USS 16 FEB 13-18 US 16 FEB 20 US 16 FEB 20 US 17 FEB 20 US 17 FEB 20 US 17 FEB 20 US 17 FEB 20 USSR 9 MAR 10 USSR 9 MAR 10 USSR 9 MAR 10 USSR 25 MAR 25 USSR 25 MAR 26			73	USSR	4 FEB	17
USSR 12 FEB 25  US 16 FEB 13-18  US 16 FEB 20  US 16 FEB 20  US 16 FEB 20  US 17 FEB 20  US 17 FEB 20  US 17 FEB 20  US 17 FEB 20  US 17 FEB 20  US 17 FEB 20  US 17 FEB 20  US 18 FEB 20  USSR 9 MAR 9  USSR 9 MAR 10  USSR 9 MAR 10  USSR 25 MAR 10  USSR 25 MAR 25  USSR 25 MAR 25  USSR 25 MAR 26			97	USSR	12 FEB	18
155R   13-18	CONTINE A	t	77	USSR	12 FEB	52
US 16 FEB PRIOR US 16 FEB 20 US 16 FEB 20 US 17 FEB 20 US 17 FEB 20 US 17 FEB 20 US 17 FEB 20 US 17 FEB 31 US 22 FEB 30 USSR 9 MAR 9 USSR 9 MAR 10 USSR 9 MAR 10 USSR 9 MAR 10 USSR 25 MAR 25 USSR 25 MAR 26 USSR 25 MAR 26	0 412.000		7.8	USSR	12 FEB	13-18
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US 17 FEB 28 US 17 FEB 20 US 17 FEB 30 US 17 FEB 31 US 18 FEB 20 US 18 FEB 20 USSR 9 MAR 9 USSR 9 MAR 10 USSR 25 MAR 10 USSR 25 MAR 25 USSR 25 MAR 25 USSR 25 MAR 25 USSR 25 MAR 25			5237	ns	16 FEB	20
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US 17 FEB 31  US 18 FEB 20  USSR 9 MAR 9  USSR 9 MAR 10  USSR 9 MAR 10  USSR 9 MAR 10  USSR 25 MAR 25  USSR 25 MAR 25  USSR 25 MAR 25  USSR 25 MAR 26  USSR 25 MAR 26		l	89	US	17 FEB	50
USSR 18 FEB 20 USSR 9 MAR 9 USSR 9 MAR 10 USSR 9 MAR 10 USSR 9 MAR 10 USSR 25 MAR 25 USSR 25 MAR 25 USSR 25 MAR 26 USSR 25 MAR 26 USSR 25 MAR 26			0	US	17 FEB	31
USSR 9 MAR 9 USSR 9 MAR 9 USSR 9 MAR 10 USSR 9 MAR 10 USSR 9 MAR 10 USSR 25 MAR 25 USSR 25 MAR 25 USSR 25 MAR 26 USSR 25 MAR 25 USSR 25 MAR 26	DISCOVEDED 21		84	US	18 FEB	20
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USSR 9 MAR 10 USSR 9 MAR 10 USSR 25 MAR 25 USSR 25 MAR 26 USSR 25 MAR 26 USSR 25 MAR 26 USSR 25 MAR 26	1		91	USSR	9 MAR	6
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USSR 25 MAR 25 USSR 25 MAR 25 USSR 25 MAR 26 USSR 25 MAR 26 USSR 25 MAR 26			93	USSR	9 MAR	01
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USSR 25 MAR 26 USSR 25 MAR 26 US 25 MAR 27	Or White		95	USSR	25 MAR	25
USSR 25 MAR 26 US 25 MAR 27	SPOINTS TO		96	USSR	- 1	26 MAR 61
US 25 MAR			76	USSR		
			. e	Sn	25 MAR	22 JUN 68

NATIONAL	CATALOG				
DESIGNATION NAME		SOURCE	LAUNCH	DĘCAY	NOTES
1961 LAUNCHES (CONT.)					
LAMBDA 1 DISCUVERER 23	100	SO	8 APR	16 APR 62	
اندا	106	SO	· 1	SEP	
- 0 -	104	USSR	_ 1	APR	
	NNA	US	. 1	Ž V	
OMICRON 14	129	Sn	29 JUN	31 AUG 81	
UMICRUN 22	137	US.	NUL 62	DEC.	
	139	SU		Ę	
OMICRÓN 27	142	Sn	NOF 62	25 DEC 67	
1	163	ŠŪ	NIII 62	E	
	146	S		ر د د	
	151	us	. i		
OMICRUN 42	157	ÙS	29 JUN	8 JAN 81	
1	161	υS	29 JUN	ALC:	
DMICRON 46	171	SS	_	N A	
	220	Sn	. 1	FEB	
	236	S	_ 1	MAY	
	238	Sn	. Ł	DEC	
	250	S	29 JUN	13 SEP 81	
UMICRUN 88	300	SN	NOF 62	15 DFC 79	
	301	Sn	4	APR	
UMICRUN 90	317	SO		11 JAN 81	30
	321	Su		FEB	
UMICKUN 99	326	Sn	29 JUN 29	7 001 79	
- 1	328	Sn	- 1	MAX	
CRICKEN 105	332	US	29 JUN	20 SEP 70	
	356	Sn	. 1	FE8	
1.	358	Sn	1	AUG	
UMICRON 120	359	ī CS	NOF 62	31 AUG 65	
	412	Sn	. 1	Š	
OMICRUN 154	473	US	NOF 62	2 MAR 72	
CHICAUN 156	477	Sn		JAN	
	J.	CS	29 JUN	15 APR 71	

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NATIONAL		CATALNG	100	1101414	24.0.10	MOTEC
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	ŲECAT	KOLES
1961 LAUNCHES (CONT.)	CONT.					
OMICKUN 190		949	NS	NUL 62	7 JUN 72	
DMICRON 194		650	NS	- 1	Ä	
		654	S	29 JUN	3 JUL 68	
CMICKIN 208		2010	SO US	1 1		
- 1		2087	Sn	- 1	HAR	
		3037	S	29 JUN 29	1 FEB 68	
DMICRUN 224		3968	Sn	1	Š	
- 1		3969	NS	- 1	N	
		4027	S	29 JUN	19 DEC 70	
		5767	211	] '	П	
DAICKUN 262		5787	SII	ŀ		
J		5877	Sn			
- 1		5972	US			
		5985	S	29 JUN	20 NOV 76	
- 1		6746	SII	1	SEC.	
DMICKON 251		9969	Sn			
	DISCOVERER 26	160	SN	7 JUL -		ţ
PI 1	CAPSULF	ANA	šn			
SIGNA Z		164 40m	25	12 JUL	30 OCT 76	
	VOSTOK 2	168	USSR	1		##
	- 1	169	USSR	- 1	- [	
1 NO 1	EXPLORER 12	170	S	16 AUG	77 SEP 63	
	RANGER 1	174	US		1	
7 H 7 CH 1 F 1	EXPLUSER 13	180	SII		- 1	
-	DISCUVERER 29	181	Sn	30 AUG	10 SEP 61	
	CAPSULE	NNA 1 0 2	811	Ł	1	
DMEGA 1 D1	DISCUVERER SO	NNA	SII	- 1		8*
2		185	S	12 SEP	18 SEP 61	
	- 1	181	50	1	ı	*
A-ALPHA I MA	<b>+</b>	184	SII	•	ES S	
1	DISCOVERER 31	186	S			
1	DISCOVERER 32	189	Sin	13 001	14 NOV 61	***
<b>-</b> 4 (	CAPSULE	<b>∀</b> 2.	\$ V	13 OCT	DCT	
A-GAMMA 3		191	Sn			
		193	NS	- 1		
1 NC	DISCUVERER 34	197	Sn	20 XOX	7 DEC 62 30 NOV 61	
		951	us Us	ļ.	DEC	
A-EPSILUN 3		200	Su	1	DEC	
5		203	SD	V V V	12 DEC 61	
1	DISCOVERER 35	201	CH .	1		

DESIGNATION	NAME	CATALOG	SOURCE	ASSINCE	DECAY
1961 LAUNCHES	ES (CJNT.)				
A-ZETA 1	CAPSULE	NNA	US	15 NOV	16 NOV
A-THETA 1	RANGER 2	206 208	SO	- 1	
A-IOTA 2	SCUMERER	209	So	29 NOV	
A-KAPPA 1	CAPSULE	NNA	SO		OEC A
	DSCAR 1	214	Sri		31 JAN 62
A-KAPPA 3		215	. S		DEC
A-LAMBDA 2		218	SO	22 DEC	- 1
A-LAMBUA 3	E S	219	Sfi		9 JAN 62
CAMMA 1	ERIENOSHIP 7	240	SII	20 EE8	20 EEB 62
GAMMA 2		241	S	n m (	FE8
EPSILUN 1	DISCOVERER 38	247	รัก	m	- 1
EPSILON 2		248	SO		3 MAR 62
- 1		249	SII		MAR
ZETA 1	050 1	251 255	Sn Sn		1
LETA 2		25 <i>7</i> 256	US	7 MAR 7 MAD	YAH
ETA 2 ETA 3		258	US.	7 HAR	
THETA 1	COSMOS 1	266	USSR	- 1	Y
I ATOI	COSMOS 2	269	USSR	6 APR	٦,
KAPPA 2		272	US	9 APR	Ä
KAPPA 6		5703	US		7 NOV 7
7		276	NS.		MAY
LAMBDA 2		277	US		APR
LAMBDA 4		279	S	- 1	APR
	CISMOS 3	280	11550	- 1	
20 6		283	USSK	24 APR	2 AUG 6
XI 1	COSMOS 4	287	USSR		APR
XI 3		289	II S S R	26 APR	# 4 E
	ARIEL 1	285	UK.		YAK
OMI CRON I		288	Sus	26 APR	APR
OMICRON 1 OMICRON 2		003	IIS	20 ADD	MAK
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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	десау	NOTES
1962 LAUNCHES (CONT.)	•	والمتعارفة والمتعارفة				
SI GMA · 1		292	Sn	ı	26 NDV 63	
- 1		293	Şii			
SIGMA 3	•	294	S S	15 MAY	13 JUL 62 24 MAY 62	<b>#</b>
TALL 2		296	Sn		MAY	1
UPSILON 1 COSMOS	5	297	USSR	- 1	HAY	
ILUN 2	=	298	USSR	28 MAY	15 DEC 62	
		202	Sil	1	1	
PHI 2		408 408	\$ D		אחר אחר	
CHI 2 OSCAR	2	305	Sn	ľ	NOS	
3		30.6	SII	- 1	A	
PSI 1		307	Sn:	17 UN	18 JUN 62	
- 1		308	Su .			
OMEGA 2		310 316	\$ v	NOC 81	12 JUL 62	
11MELA 5		4251	511	NIII. 91	120	
_		315	US			
A-CAMMA 1		316	SN.	1		
- 1	9	338	USSR	- 1	AUG	
~		339	USSR	30 JUN	SEP	
- 1		34.2	Şii	- 1		
A-ZETA 2		υ φ υ υ	8 V	18 JOL	14 AUG 62	
A-THETA 1		345	Sn	ı	Y NC	
-	7	346	บรรู	ł	AUG	
7		347	USSR	28 JUL	21 AUG 62	
		348	USSR	- [		
A-101A 4		ው ያ ር	055K	28 JUL 82	30 JUL 62 26 AHG 62	
A-KAPPA		362	Sn		AUG	
4		361	iŭs	- 1	AUG	
A-MU 1 VOSTUK	£ 3	363	USSR	11 AUG	15 AUG 62	# ₩
7	- 1	364	NSSI.		3	40
A-NU I VUSTUK	<b>4</b>	365 366	X 00 0	12 AUG		,
A-XI I COSMOS	8	367	USSR		AUG	
2	- 1	368	USSR	- 1	AUG	
A UMICKON 2		370	Sn			
A-PI 1		371	USSR	1	AUG	
•		372	USSR	25 AUG	2 SEP 02	
		373	110.00	ר ו	SFP	
4 Id-4		217	A550	25 AUG	30 AUG 62	
A-P! 6		376	USSR		SEP	
		386	USSR	- 1	SEP	
A-PI 3		387	USSR	25 AUG	5 SEP 62	
A-SIGMA 1		377	SU	1		
A-TAU 1		381	USSR	- NE	2 CED 42	
A-TAU 2		382	Accu	- Jak 4		

## ORIGINAL PAGE 18 OF POOR QUALITY

62 LAUNCHES (CONT.)     383     USSR     1 SE       1701 3     383     USSR     1 SE       1701 4     383     USSR     1 SE       1701 1     383     USSR     1 SE       1701 1     383     USSR     1 SE       1701 1     383     USSR     1 SE       1801 1     383     USSR     1 SE       181 1     383     USSR     1 SE       181 1     383     USSR     1 SE       181 1     383     USSR     1 SE       181 1     383     USSR     1 SE       181 1     383     USSR     1 SE       181 1     383     USSR     1 SE       181 1     383     USSR     1 SE       181 1     383     USSR     1 SE       181 1     383     USSR     1 SE       181 1     483     USSR     1 SE       181 1     483     USSR     1 SE       181 1     483     USSR     2 SE       181 1     483     USSR     2 SE       182 1     483     USSR     2 SE       182 1     483     USSR     2 SE       182 1     483     USSR     2 SE       182 1 <th>DESIGNATION NATIONAL</th> <th>NAME</th> <th>CATALDIS NUMBER</th> <th>SOURCE</th> <th>LAUNCH</th> <th>DĘCAY</th>	DESIGNATION NATIONAL	NAME	CATALDIS NUMBER	SOURCE	LAUNCH	DĘCAY
JN 1 383 1/55 2 15 EP 21 SEP 38 EP 10 CT 3 SEP 10 SEP 38 EP 10 SEP 38	S	NT - )				
NN 1 385 USS 1 SEP 26 OCT 2 SEP 14 SEP 390 USS 2 SEP 15 SEP 15 SEP 15 SEP 15 SEP 15 SEP 15 SEP 15 SEP 15 SEP 15 SEP 15 SEP 15 SEP 15 SEP 16 SE			383	USSR	w	EP-1 OCT
390 USSR 12 SEP 13 SEP 13 SEP 13 SEP 14 SEP 13 SEP 14 SEP 13 SEP 14 SEP	NCJI		385	SO		
SERS 2   392   USSR   12 SEP   13 SEP   13 SEP   13 SEP   14 SEP   14 SEP   14 SEP   15 SEP   15 SEP   15 SEP   16 SEP	- 1	:	390	USSR		SEP
ERS 2 396 USSR 12 SEP 16 SEP 1	ı		392	USSR		935 635
ERS 2 396 USSR 12 SEP 16 SEP 16 SEP 18 SEP 19 SEP 1	-		393	assii	- 1	SEP
ERS 2 396 US 17 SEP 16 NOV  1 1 122 USSR 27 SEP 27 OCT  2 1 123 USSR 27 SEP 30 CT  3 2 123 USSR 27 SEP 40 CT  4 2 1			394	USSR		SEP
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 ERS	2	396	SO	- 1	NO.
A	-DHEGA 1		422	USSR	- 1	CT P
S	- 1		A 23	HSSE		
S   S   S   S   S   S   S   S   S   S	1		<b>\$28</b>	ASSU	1	5
Total Property   Tota	-		429	USSR		
EXPLORER 14			431	USSR	- 1	22
EXPLORER 14	RETA 1		427	NSSH ASSH	- 1	3
SIGMA 7	GAMMA 1	DRER 14	432	Šu	1	=
NN 1 436 USSR 9 OCT 16 NOV 437 USSR 17 OCT 21 NOV 438 USSR 17 OCT 21 NOV 438 USSR 17 OCT 21 NOT 24 NOT 25 N	) <b>-</b> i	A 7	433	SO		OCT
ZETA 2         438         USSR         17 DCT         5 NDV           THETA 1         441         USSR         20 DCT         18 MAY           THETA 2         442         USSR         20 DCT         18 MAY           THETA 1         SPUTNIK 29         445         USSR         20 DCT         29 DCT           TOTA 3         USSR         24 DCT         29 DCT         29 DCT         29 DCT           TOTA 4         458         USSR         24 DCT         20 ECR         20 DCT         20 ECR           TOTA 5         458         USSR         24 DCT         26 EEB         20 DCT         26 EEB         27 DCT         26 EEB         20 DCT         26 DCT         26 DCT         26 DCT         26 DCT         27 DCT         26 DCT         27 DCT         28 DCT         27 DCT         28 DCT         27 DCT         20 DCT         27 DCT         20 DCT         20 DCT         20 DCT         20 DCT         20 DCT         20 DCT         20 DCT         20 DCT         20 DCT         20 DCT         21 DCT         20 DCT         21 DCT         21 DCT         21 DCT         22 DCT         23 DCT         23 DCT         23 DCT         23 DCT         23 DCT         20 DCT         23 DCT         20 DCT	Ž		436	US		VON
THETA 2  101A 1  SPUTNIX 29  4A3  101A 2  SPUTNIX 29  4A3  101A 1  SPUTNIX 29  4A3  101A 1  SPUTNIX 29  4A3  101A 1  SPUTNIX 29  4A3  101A 1  SPUTNIX 29  4A3  101A 1  SPUTNIX 29  4A3  101A 1  SPUTNIX 29  4A3  101A 1  SPUTNIX 29  4A3  101A 1  SPUTNIX 29  4A3  101A 1  SPUTNIX 29  4A3  101A 1  SPUTNIX 29  4A3  101A 1  SPUTNIX 29  4A3  101A 1  SPUTNIX 29  4A3  101A 1  SPUTNIX 29  4A3  101A 1  SPUTNIX 29  4A3  101A 1  SPUTNIX 29  4A3  101A 1  SPUTNIX 29  4A3  101A 1  A34  A35  101A 1  A35  101A 1  A36  101A 1  101A 1  A37  101A 1  A38  101A 1  A38  101A 1  A39  101A 1  A30  1	ZETA ATBZ		438	USSR		NO.
IDTA	121		442	USSR		NO
IDTA   458   USSR   24 OCT   25 DEC   IDTA   15   IDTA   15   IDTA   458   USSR   24 OCT   25 DEC   IDTA   25 DEC   IDTA   15 DEC   IDTA   15 DEC   IDTA   15 DEC   IDTA   15 DEC   IDTA   16   IDTA   16   IDTA   16   IDTA   17   IDTA   17   IDTA   18   IDTA   18   IDTA   18   IDTA   18   IDTA   18   IDTA   18   IDTA   IDT	IOTA 2		456	USSR		DEC
IUTA 5			458	USSR		NOV
10TA 6     460     USSR     24 OCT     8 DEC       10TA 7     482     USSR     24 OCT     10 DEC       10TA 10     483     USSR     24 OCT     10 DEC       10TA 11     485     USSR     24 OCT     10 DEC       10TA 12     487     USSR     24 OCT     25 DEC       10TA 13     491     USSR     24 OCT     15 DEC       10TA 14     493     USSR     24 OCT     15 DEC       10TA 15     493     USSR     24 OCT     17 DEC       10TA 16     495     USSR     24 OCT     25 DEC       10TA 18     497     USSR     24 OCT     26 DEC       10TA 19     497     USSR     24 OCT     26 DEC       10TA 20     498     USSR     24 OCT     26 DEC	TULA		459	ussa	<b>P</b>	DEC.
101A 10     483     USSR     24 OCT     2 JAN       101A 10     485     USSR     2A OCT     10 DEC       101A 11     486     USSR     24 OCT     30 NOV       101A 12     487     USSR     24 OCT     25 DEC       101A 13     491     USSR     24 OCT     15 DEC       101A 15     493     USSR     24 OCT     21 DEC       101A 16     495     USSR     24 OCT     17 DEC       101A 17     495     USSR     24 OCT     25 DEC       101A 18     497     USSR     24 OCT     26 DEC       101A 19     497     USSR     24 OCT     26 DEC       101A 20     498     USSR     24 OCT     10 DEC       101A 20     498     USSR     24 OCT     10 DEC       101A 20     498     USSR     24 OCT     10 DEC       101A 20     498     USSR     24 OCT     10 DEC       101A 20     498     USSR     24 OCT     10 DEC       101A 20     498     USSR     24 OCT     10 DEC       101A 20     498     USSR     24 OCT     10 DEC	ATOI		460 482	USSR	•	DEC
IOTA 11     486     USSR     24 OCT     30 NOV       IOTA 12     487     USSR     24 OCT     1 DEC       IOTA 13     491     USSR     24 OCT     25 DEC       IOTA 15     492     USSR     24 OCT     15 DEC       IOTA 15     493     USSR     24 OCT     21 DEC       IOTA 16     495     USSR     24 OCT     26 DEC       IOTA 17     495     USSR     24 OCT     26 DEC       IOTA 19     497     USSR     24 OCT     26 DEC       IOTA 20     498     USSR     24 OCT     10 DEC       IOTA 20     498     USSR     24 OCT     10 DEC       IOTA 20     498     USSR     24 OCT     10 DEC       IOTA 20     498     USSR     24 OCT     10 DEC       IOTA 20     498     USSR     24 OCT     10 DEC	IOTA		A 40 ()	USSR	•	D A I
10TA 13     491     USSR     24 OCT     25 DEC       10TA 14     492     USSR     24 OCT     15 DEC       10TA 15     493     USSR     24 OCT     21 DEC       10TA 16     494     USSR     24 OCT     25 DEC       10TA 17     495     USSR     24 OCT     23 DEC       10TA 18     497     USSR     24 OCT     26 DEC       10TA 19     497     USSR     24 OCT     26 DEC       10TA 20     498     USSR     24 OCT     10 DEC       10TA 20     498     USSR     24 OCT     10 DEC       10TA 21     498     USSR     24 OCT     10 DEC       10TA 20     498     USSR     24 OCT     10 DEC       10TA 20     498     USSR     24 OCT     10 DEC	VIOI		486	USSR	*	VON O
10TA 14     492     USSR     24 DCT     15 DEC       10TA 15     493     USSR     24 DCT     21 DEC       10TA 16     494     USSR     24 DCT     17 DEC       10TA 17     495     USSR     24 DCT     23 DEC       10TA 18     497     USSR     24 DCT     26 DEC       10TA 20     498     USSR     24 DCT     10 DEC       10TA 20     498     USSR     24 DCT     10 DEC       10TA 20     498     USSR     24 DCT     10 DEC	101A		164	USSR	*	DEC
101A 15 101B 495 101B 19 101B			A 9 2	USSE	▘₱	
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A	DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DĘCAY	NOTES
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1			489	USSR		DEC	
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LAUNCHES         COLIA         521         USSR         4 JAN         5 JAN           001A         524         USSR         4 JAN         11 JAN           001C         524         USSR         4 JAN         11 JAN           001C         524         USSR         4 JAN         11 JAN           001C         524         USSR         4 JAN         11 JAN           002A         US         7 JAN         14 JAN         24 JAN           003B         526         US         7 JAN         16 JAN           003B         003B         US         16 JAN         9 JAN           004B         528         US         14 FEB         2 ND           005B         532         US         19 FEB         29 JAN           005B         534         US         19 FEB         29 JAN           005B         534         US         19 FEB         29 JAN           005B         536         USSR         21 AR         26 AR           005B         555         USSR         2 APR         26 AN           007A         564         USSR         2 APR         24 NDY           007B         565 <td< td=""><td>1</td><td></td><td>518</td><td>USSR</td><td></td><td>NAS</td><td></td></td<>	1		518	USSR		NAS	
001A         521         USSR         4 JAN         5 JAN           001B         524         USSR         4 JAN         11 JAN           001C         524         USSR         4 JAN         11 JAN           001C         525         US         7 JAN         24 JAN           002B         526         US         7 JAN         24 JAN           002B         527         US         16 JAN         9 JAN           003B         528         US         16 JAN         9 JAN           003B         US         16 JAN         9 JAN           004B         529         US         16 JAN         8 NOY           005B         US         18 JAN         29 JAN           005B         534         US         19 FEB         29 JAN           005B         534         US         19 FEB         29 JAN           005B         534         US         21 JAR         9 AR           005B         534         US         21 JAR         9 AR           006B         534         US         21 JAR         9 AR           006B         555         US         2 APR         24 ANY	- 1						
0011A         521         USSR         4 JAN         9 JAN           0011B         524         USSR         4 JAN         11 JAN           0011C         524         USSR         4 JAN         11 JAN           0011C         525         US         7 JAN         24 JAN           002B         US         16 JAN         9 JAN           002B         US         16 JAN         8 UA           003B         US         16 JAN         8 UA           003B         US         16 JAN         8 UA           004B         532         US         16 JAN         8 UA           005B         US         10 FEB         29 JUN           005B         US         19 FEB         29 JUN           005B         US         19 FEB         29 JUN           006B         534         US         19 FEB         29 JUN           006B         535         USSR         21 MAR         9 APR           006B         554         USSR         21 MAR         9 APR           004B         565         US         3 APR         24 NDV           009B         565         US         3 APR         24 NDV<						1	
001B         524         USSR         4 JAN         11 JAN           001C         525         US         7 JAN         24 JAN           002B         US         7 JAN         24 JAN           002B         US         16 JAN         9 JAN           002B         US         16 JAN         9 JAN           003B         US         16 JAN         9 JAN           004B         US         16 JAN         9 JAN           004B         US         16 JAN         9 JAN           005B         US         16 FEB         2 NOV           005B         US         19 FEB         29 MAY           004B         535         USS         21 MAR         9 APR           004B         563         USS         2 APR         24 NDV           009B         564         US         3 APR         24 NDV           009B         565         US         3 APR			521	0.558	2 2 7 -	2 4	
001C         527         USN         7 JAN         24 JAN           002A         003A         0 LS         7 JAN         24 JAN           002A         003A         0 LS         7 JAN         16 JAN         24 JAN           003A         003B         0 LS         1 LS         1 LS         1 LS         1 LS           003B         004B         529         0 LS         1 LS         1 LS         2 LAN         8 NOV           004B         532         0 LS         1 LS         1 LS         2 LAN         8 NOV           005B         534         0 LS         1 LS         1 PEB         29 HAY           005B         534         0 LS         1 LS         29 HAY           005B         536         0 LS         21 HAR         29 HAR           005B         555         0 USSR         21 HAR         29 HAR           007A         563         0 USSR         2 APR         24 NOV           009B         564         0 USSR         2 APR         24 NOV           009B         564         0 USSR         3 APR         24 NOV           009B         564         0 USSR         3 APR         24 NOV </td <td></td> <td></td> <td>276</td> <td>110.00</td> <td>1</td> <td>2</td> <td></td>			276	110.00	1	2	
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003B         52B         US         16 JAN         B NOV           003B         103         10 JAN         31 DEC           004B         532         US         14 FEB         2 ADV           005A         15         10         10         2 ADV           005B         534         US         19 FEB         29 HAY           005B         535         US         19 FEB         29 HAY           005D         536         USSR         21 HAR         29 HAR           006A         555         USSR         21 HAR         29 HAR           007A         562         USSR         2 APR         26 APR           009A         563         USSR         2 APR         24 NOV           009B         564         USS         3 APR         24 NOV           009B         565         USSR         3 APR         24 NOV           009B         567         USSR         3 APR         24 NOV			527	มร	- 1	IAN	
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005B         534         US         19 FEB         29 MAY           005C         535         US         19 FEB         29 JUN           005D         536         US         19 FEB         29 JUN           005D         554         USSR         21 MAR         9 APR           006B         555         USSR         21 MAR         9 APR           007A         555         USSR         2 APR         3 APR           009A         563         US         3 APR         24 NOV           009B         565         US         3 APR         24 NOV           009B         565         US         3 APR         24 NOV           009B         565         US         3 APR         29 AUG			533	US	•	H	
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0006B         555         USSR         21 MAK         9 APK           007A         002A         1 APR         26 APR         3 APR         26 APR         3 APR         3 APR         24 NOV           009B         EXPLORER 17         565         US         3 APR         24 NOV           009B         565         US         3 APR         29 AUG	- 1		554	NSK.			
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					NT.)	1963 LAUNCHES (CONT.)
NOTES	DECAY	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION
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CATAL DG NUMBER		588	587	590	591	242	601	599	600	597	617	611	595	270	607 607	609	612	62000	615	616	618	619	620	623	629	626	627	632	636	642	638	639	640	199	663	664 665	999	667	668	675	673
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DESIGNATION NAME NUMBER S  1963 LAUNCHES (CONT.)  1963 U416 676 677 U  1963 U416 678 689 U  1963 U416 689 U  1963 U416 689 U  1963 U416 689 U  1963 U416 689 U  1963 U416 689 U  1963 U416 689 U  1963 U416 689 U  1963 U416 689 U  1963 U416 689 U  1963 U416 689 U  1963 U416 689 U  1963 U416 689 U  1963 U416 689 U  1963 U417 689 U  1963 U417 689 U  1963 U417 689 U  1963 U417 689 U  1963 U418 699 U  1963 U418 699 U  1963 U418 699 U  1963 U418 699 U  1963 U418 699 U  1963 U418 699 U  1963 U418 699 U  1963 U418 699 U  1963 U418 699 U  1963 U418 699 U  1963 U418 699 U  1963 U418 699 U  1963 U418 699 U  1963 U418 699 U  1963 U418 699 U  1963 U418 699 U  1963 U418 699 U  1963 U418 699 U  1964 U418 699 U  1965 U418 699 U  1966 U418 699 U  1967 U418 699 U  1968 U418 699 U	25 FEB 25 FEB 27 FEB 27 FEB
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CHATIUN NAME LAUNCHES (CONT.)  U40B C41A U41B C41C 041D 042A 042A 042A 042A 043A POLYDT 1 043B 042C 043B C0SMDS 21 044B 045A COSMDS 22 045B 047N 047N 048A 049J	5 5
CHATIUN NAME  LAUNCHES (CONT.)  U40B CA1A  U41B C41C C41C 041D 042A 042A 042A 042A 043A 043A 043A 043B 044A CDSMOS 21 044B 045B 046A EXPLORER 18 047P 048A	
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GNATION NAME  LAUNCHES (CONT.)  040B  041B  041B  041B  042A  042A  042B  042A  043B  043B  043C  043C  043C  043B  044A  045A  045A  COSMOS 21  045B	27 27
GNATION     NAME     NUMBER       LAUNCHES (CONT.)     676       0418     678       0418     678       C41C     679       041D     680       042A     681       042A     682       042A     682       042B     683       043B     PDLYUT 1     683       043B     685     685       043C     685     686       044A     CDSMOS 21     687       044B     68B     68B	1
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CAUNCHES (CONT.)  U408 C418 C418 C41C 0410 0428 0428 0428 0428 0428 0438 POLYOT 1	
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ION	NAME NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1964 LAUNCHES (CONT.)	Application of the control of the co				
1	762	USSR	27 FEB	4 MAR 64	
1964 011b	759	US		1 "	
	760	SII	- 1	- 1	
1964 U11C	761 2663	S O S	28 FEB 28 FFB	21 SEP 65 1 MAR 67	
1	764	SN	ı		
- 1	765	SII	- 1	- 1	
	992	USSR			
,	191	USSR	18 MAR	20-22 ADP 64	
1964 013C	264	85.50	X X		
1	770	USSR	MAR	ì	
1964 014B	712	USSR		HE E	
	773	USSR	27 MAR	30-31 MAR 64	
0161	771	311	1		
1964 015A AKIEL 2 1964 0158	111	SII		APR	
1	847	\$n,		-	
	776	USSR	- 1	APR	Oi Oi
	777	USSR	2 APR	2 APR 64	F
0166	118	1558	4 400	12 400 44	PC
1964 01/A CUSMUS 28	780	355U	A APR	3	O
į .	781	USSR	4 APR		R
1964 DIBA GEMINI 1	782		dd		Q
1964 019A	783	USSR	12 APR30	APR-1 MAY 64	UA
	786	sn.	23 APR	28-29 APR 64	LI
	787	us	23 APR	- 1	ון דו
	788	Sn	23 APR	25 APR 64	Y
	789	- Kil	23 APK	1	
1964 020E	190	\$0 1	25 APR	2 MAY 64	
	192	USSR	25 APR	ł	
	793	USSR	- 1	- 1	
	194	USSR	-	27-28 APR 64	
1964 021F	795	USSR		X :	
022A	796	SD:	Z/ APK	20 MAT 04	
,	767	USSK	•	1.	
	798	USSK S	TR ST	90 NOK /	
SA DEA CATION A	773	311	1	1	
20.40	12142	US		25 OCT 81	
Į.	802	SN	NOC ♦		
- 1	803	USSR	NILL 4	7	
0288	804	USSR	NOT 9	16 AUG 64	
1964 029A COSMOS 32	807	USSK	NUL OI	TO NOT BE	

COSMUS 34   AZE   COSMUS 35   AZE   COSMUS 36   AZE   COSMUS 37			DECATED DRIEGIS				
CAMPILION   NAME   NUMBER   SQURCE   CANCH   DECANO	NATIONAL .		CATALOG				
LAUNCHES (CONT.)	DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTE
District   District	LAUNCHES	ONT.)					
1324   134	964		811	Sn	- 1	NO N	
1934   COSHOS 34   816   USSR 23 JUN 1 1 JUL 134 JUN 10	- 1		816	200	- 1	AUG	
O.334   COSHOS 33   B16   USSR 23 UN   1 UN   1 UN   1 UN   2 U	ŧ		821	SO		<u> </u>	
1930   1930	033A		816	USSR	- 1	٦	
COSMOS 34   COSMOS 34   COSMOS 34   COSMOS 34   COSMOS 34   COSMOS 34   COSMOS 34   COSMOS 34   COSMOS 34   COSMOS 34   COSMOS 34   COSMOS 34   COSMOS 37   COSMOS 37   COSMOS 37   COSMOS 38   COSMOS 37   COSMOS 37   COSMOS 37   COSMOS 37   COSMOS 38   COSMOS 37   COSMOS 38   COSMOS 37   COSMOS 38   COSMOS 37   COSMOS 38   COSMOS 37   COSMOS 38   COSMOS 37   COSMOS 38   COSMOS 38   COSMOS 37   COSMOS 37   COSMOS 37   COSMOS 38   COSMOS 37   COSMOS 38   COSMOS 37   COSMOS 38   COSMOS 37   COSMOS 38   COSMOS 37   COSMOS 38   COSMOS 37   COSMOS 38   COSMOS 37   COSMOS 38   COSMOS 37   COSMOS 38   COSMOS 37   COSMOS 38   COSMOS 37   COSMOS 37   COSMOS 37   COSMOS 38   COSMOS 37   COSMOS 38   COSMOS 37   COSMOS 38   COSMOS 37   COSMOS 38   COSMOS 37   COSMOS 38   COSMOS 37   COSM	- 1		818	USSB		F	
1934   COSHOS 34   822   USSR   1 JUL   9 JUL   19 JUL	i		819	11888		2 2	)
1936   1936	034A	w	822	USSR	. [	٦	OF
1936    328   193   19	- 1		823	100	- 1		d
1936b   1936b   1936b   1936b   1937b		825	55		= }	0	
O 27 A   O			826	US	1	NA	ac
Dabb   Electron   Bas   Date			828	US			Ò
COSMOS 35   Sasa   COSMOS 35   Sasa   COSMOS 35   Sasa   COSMOS 35   Sasa   COSMOS 35   Sasa   COSMOS 35   Sasa   COSMOS 35   Sasa   COSMOS 35   Sasa   COSMOS 35   Sasa   COSMOS 35   Sasa   COSMOS 35   Sasa   COSMOS 35   Sasa   COSMOS 36   Sasa   COSMOS 37	0388	CIRUNA	830	USSR		ber	A۱
O39F   CQSMQS 35	1		5892	E COUR		A UG	רנ ב
D3996   D3905   D3906   D390	038F		5893	USSR	- 1	Š	21 Y1
D39D         B35         USSR         15 JIII         31 JIII         041D         042D         B35         USSR         15 JIII         25 JIII         25 JIII         21 JIII         25 JIII         21 JIII         22 JIII         21 JIII         23 JIII         24 JIII         24 JIII         24 JIII         24 JIII         24 JIII         25 JIII         24 JIII         24 JIII         24 JIII         24 JIII         24 JIII         24 JIII         24 JIII         24 JIII         24 JIII         24 JIII         24 JIII         24 JIIII         24 JIIII         24 JIIII	039В		834	USSR	1	ន្ត្	
OAOC         ERS 13         838         US         17 JUL         23 JUL         29 JUL         29 JUL         29 JUL         29 JUL         29 JUL         29 JUL         29 JUL         29 JUL         29 NOV           0428         B45         USSR         30 JUL         29 NOV         18 EEB           0448         CUSMOS 36         B45         USSR         14 AUG         23 AUG           0448         CUSMOS 37         B46         USSR         14 AUG         23 AUG           0448         CUSMOS 38         B52         USSR         14 AUG         23 AUG           0448         CUSMOS 38         B53         USSR         18 AUG         23 AUG           0446         CUSMOS 39         B53         USSR         18 AUG         23 AUG           0446         CUSMOS 40         B54         USSR         18 AUG         19 FEB         USSR         18 AUG         19 FEB         18 AUG         19 FEB         18 AUG			830	ASSI	- 1		
042A         COSMOS 36         842         USSR         28 JUL         28 EER           042B         845         USSR         30 JUL         28 EER           044A         CUSHOS 37         848         USSR         14 AUG         23 AUG           044A         CUSHOS 38         850         USSR         14 AUG         23 AUG           045B         USSR         14 AUG         23 AUG           044A         CUSHOS 38         850         USSR         14 AUG         23 AUG           045C         CUSHOS 39         854         USSR         18 AUG         8 AUG           044C         CUSHOS 39         854         USSR         18 AUG         18 AUG           044C         CUSHOS 39         855         USSR         18 AUG         18 AUG           044C         CUSHOS 39         855         USSR         18 AUG         18 AUG           044C         CUSHOS 39         855         USSR         18 AUG         19 FEB           044C         CUSHOS 39         859         USSR         18 AUG         19 FEB           044C         BAS         USSR         18 AUG         5 SEP           044C         BAS         USSR	0400	13	878	ST		E	
042B         845         USSR         30 JUL         29 NOV           044A         CUSMOS 37         848         USSR         14 AUG         23 AUG           044A         CUSMOS 37         848         USSR         14 AUG         23 AUG           045A         850         USSR         14 AUG         23 AUG           045A         851         USSR         14 AUG         23 AUG           046A         CUSHQS 38         853         USSR         18 AUG         18 AUG           046A         CUSHQS 39         854         USSR         18 AUG         18 AUG           046B         CUSHQS 39         854         USSR         18 AUG         17 NQV           046C         CUSHQS 39         854         USSR         18 AUG	0424	10S 36	240	115.58		ון כ ה ה	_
044Å         CDSMOS 37         848         USSR         14 AUG         23 AUG           044Å         B48         USSR         14 AUG         23 AUG           045Å         B50         USSR         14 AUG         3 SER           045B         B51         USSR         14 AUG         23 AUG           046A         CDSMOS 38         B53         USSR         18 AUG         18 AUG           046A         CDSMOS 40         B55         USSR         18 AUG         18 AUG           046C         CDSMOS 40         B55         USSR         18 AUG         18 AUG           046C         CDSMOS 40         B55         USSR         18 AUG         18 AUG           046C         B55         USSR         18 AUG         18 AUG         18 AUG         18 AUG           046A         B55         USSR         18 AUG         5 SER           044A         B55         USSR         18 AUG         4 SER         18 AUG         4 SER           049A         B65         USSR         22 AUG         3 HAR           <	0428		8 8 5 5 T	USSR	JUL	NO.	
0448         849         USSR         14 AUG         3 SEP           0458         850         US         14 AUG         23 AUG           045C         851         US         14 AUG         23 AUG           046A         CUSHOS 38         853         USSR         18 AUG         18 AUG           046B         COSHOS 40         854         USSR         18 AUG         17 NOV           046C         COSHOS 40         855         USSR         18 AUG         19 NOV           046F         859         USSR         18 AUG         19 SEP           046F         859         USSR         18 AUG         6 SEP           046F         859         USSR         18 AUG         6 SEP           049A         861         USSR         18 AUG         6 SEP           049A         863         USSR         21 AUG         6 SEP           049B         863         USSR         22 AUG         28 SEP           049C         865         USSR         22 AUG         28 SEP           049C         867         USSR         22 AUG         20 AUG           050A         CUSMOS 43         864         USSR         22 AUG	044A C		848	USSR	AUG	Aug	
0458         850         US         14 AUG         23 AUG           0458         851         US         14 AUG         8 AAR           0467         CUSMOS 39         854         USSR         18 AUG         18 AUG           0468         CUSMOS 40         855         USSR         18 AUG         17 NOV           0460         CUSMOS 40         855         USSR         18 AUG         18 NOV           0460         CUSMOS 40         857         USSR         18 AUG         18 NOV           0464         B59         USSR         18 AUG         18 NOV         10 SEP           0465         B59         USSR         18 AUG         10 SEP           0486         B59         USSR         18 AUG         6 SEP           0498         B60         USSR         18 AUG         6 SEP           0498         B63         USSR         21 AUG         15 SEP           0498         B63         USSR         22 AUG         28 SEP           0498         B64         USSR         22 AUG         28 SEP           0498         B65         USSR         22 AUG         28 SEP           0490         B66         USSR <td>0448</td> <td>-</td> <td>849</td> <td>usse</td> <td>1</td> <td>SEP</td> <td></td>	0448	-	849	usse	1	SEP	
JASC         CUSMOS 3B         852         US         14 AUG         16 AUG           O46A         CUSMOS 39         854         USSR         18 AUG         17 NOV           O46B         CUSMOS 40         855         USSR         18 AUG         17 NOV           C46C         CUSMOS 40         856         USSR         18 AUG         18 NOV           C46C         CUSMOS 40         857         USSR         18 AUG         19 FEB           O46F         857         USSR         18 AUG         10 SEP           O44B         857         USSR         18 AUG         6 SEP           O49A         861         USSR         21 AUG         31 MAR           O49A         865         USSR         22 AUG         31 MAR           O49A         865         USSR         22 AUG         28 SEP           O49A         865         USSR         22 AUG         30 AUG           O50A         COSMOS 42         864         USSR         22 AUG         20 AUG           O50A         USSR         22 AUG         27 AUG         27 AUG           O50C         COSMOS 43         867         USSR         22 AUG         27 AUG <tr< td=""><td>ı</td><td></td><td>850 851</td><td>: CS</td><td></td><td>A V</td><td></td></tr<>	ı		850 851	: CS		A V	
046A         COSMOS 38         853         USSR         18 AUG         8 NOV           046B         COSMOS 40         854         USSR         18 AUG         17 NOV           C46C         COSMOS 40         855         USSR         18 AUG         18 NOV           C46D         856         USSR         18 AUG         19 FEB           O46D         857         USSR         18 AUG         10 SEB           O46E         859         USSR         18 AUG         10 SEB           O46F         860         USSR         18 AUG         6 SEB           O48A         861         USSR         21 AUG         31 MAR           O49B         868         USSR         22 AUG         30 AUG           O50A         COSMOS 42         864         USSR         22 AUG         28 SEB           O50A         COSMOS 43         867         USSR         22 AUG         27 AUG         27 AUG           O51C         COSMOS 43         867         USSR         25 AUG         27 AUG           O51C         COSMOS 43         874         USSR         25 AUG         27 AUG           O51D         874         USSR         25 AUG         27 AUG<			852	SO		ត្ត	
0466         COSMOS 39         854         USSR         18 AUG         17 NOV           0466         COSMOS 40         855         USSR         18 AUG         18 NOV           0466         B55         USSR         18 AUG         19 FEB           0466         B57         USSR         18 AUG         10 SEP           0467         B60         USSR         18 AUG         6 SEP           0480         B61         USSR         21 AUG         31 MAR           0490         B65         USSR         22 AUG         31 MAR           0490         B65         USSR         22 AUG         30 AUG           0500         COSMOS 42         B64         USSR         22 AUG         29 SEP           0500         COSMOS 43         B67         USSR         22 AUG         27 AUG         27 AUG           0510         COSMOS 43         B67         USSR         25 AUG         27 AUG         27 AUG           0510         B67         USSR         25 AUG         27 AUG         27 AUG         27 AUG           0510         B67         USSR         25 AUG         27 AUG         27 AUG         27 AUG         27 AUG         27 AUG	0464		853	USSR	1	NOV	
046D     856     USSR     18 AUG     19 FEB       046E     857     USSR     18 AUG     10 SER       046F     859     USSR     18 AUG     6 SEP       046F     860     USSR     18 AUG     6 SEP       048A     861     USSR     21 AUG     31 MAR       049A     865     USSR     22 AUG     28 SEP       049B     USSR     22 AUG     28 SEP       049C     868     USSR     22 AUG     28 SEP       050A     COSMOS 42     864     USSR     22 AUG     29 DEC       050B     USSR     22 AUG     27 DEC       050C     COSMOS 43     867     USSR     22 AUG     27 DEC       051C     USSR     22 AUG     27 DEC       051D     874     USSR     25 AUG     18 APR	0468		0 00 00 00 00 00 00 00 00 00 00 00 00 0	USSR		N N	
046F     046F     859     USSR     18 AUG     6 SEP       046G     869     USSR     18 AUG     6 SEP       048A     861     USSR     21 AUG     31 MAR       049A     863     USSR     22 AUG     15 SEP       049B     865     USSR     22 AUG     28 SEP       049C     868     USSR     22 AUG     30 AUG       050A     COSMOS 42     864     USSR     22 AUG     29 AUG       050B     867     USSR     22 AUG     27 AUG       051C     COSMOS 43     867     USSR     25 AUG     27 AUG       051D     874     US     25 AUG     18 APR	046D		856	USSR	I	FEB	
0466       B60       USSR       18 AUG       6 SEP         048A       861       USSR       21 AUG       31 MAR         049A       863       USSR       22 AUG       15 SEP         049B       USSR       22 AUG       28 SEP         049C       868       USSR       22 AUG       30 AUG         050A       CDSMDS 42       864       USSR       22 AUG       29 DEC         050B       USSR       22 AUG       27 DEG         050C       CDSMDS 43       867       USSR       22 AUG       27 DEG         051C       USSR       25 AUG       27 AUG       27 DEG         051D       873       US       25 AUG       18 APR         051D       874       US       25 AUG       17 IIIN			859	USSR	- 1	SE	
048A     861     US     21 AUG     31 MAR       049A     863     USSR     22 AUG     15 SEP       049B     USSR     22 AUG     28 SEP       049C     865     USSR     22 AUG     30 AUG       050A     COSMOS 42     864     USSR     22 AUG     19 DEC       050B     USSR     22 AUG     27 DEC       051C     COSMOS 43     867     USSR     22 AUG     27 DEC       051C     874     US     25 AUG     18 APR       051D     874     US     25 AUG     17 IIIN	1		860	ASSU	1	SEP	
0498     0498     0498     USSR     22 AUG     28 SEP       049C     868     USSR     22 AUG     30 AUG       050A     COSMOS 42     864     USSR     22 AUG     19 DEC       050B     USSR     22 AUG     2 AUG       050C     COSMOS 43     867     USSR     22 AUG     27 DEC       051C     873     US     25 AUG     18 APR       051D     874     US     25 AUG     17 IIIN			861	SU		MAR	
049C     868     USSR     22 AUG     30 AUG       050A     CDSMDS 42     864     USSR     22 AUG     19 DEC       050B     USSR     22 AUG     2 AUG       050C     CDSMDS 43     867     USSR     22 AUG     27 DEC       051C     873     US     25 AUG     18 APR       051D     874     US     25 AUG     17 IIIN			865 8	USSK.	- 1	SEP	
053A     CDSMDS 42     864     USSR     22 AUG     19 DEC       050B     050B     USSR     22 AUG     2 AUG       050C     CDSMDS 43     867     USSR     22 AUG     27 DEC       051C     873     US     25 AUG     18 APR       051D     874     US     25 AUG     17 IIIN	1		868	9551		AUG	
0508 USSR 22 AUG 27 DEC 0508 USSR 22 AUG 27 DEC 051C USSR 22 AUG 18 APR 051D US 25 AUG 18 APR 051D 874 US 25 AUG 18 APR	050A	•	864	USSR		DEC.	
0510 874 US 25 AUG 18 APR	0506	_	8:5 <b>6</b>	0558	- 1	3 6	
051D 874 US 25 AUG 17 IIII	0510	Ι.	873	US	ı	אפע סבינ	
23 AOG LI JON			874	US		JUN	

INTER-		DECAYED DBJECTS				
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1964 LAUNCHES	ES (CUNT.)					
		The second secon	The state of the s	ļ	- 1	
1964 U52A 1964 U52B	NIMBUS 1	872 878	US	28 AUG 28 AUG	16 MAY 74	
1964 055A		880	USSR	l	18 SEP 64	
1		882	SO SI	1	1	
1	SATURN 7	883	Sn	18 SEP	1	
1964 0588		887	SN	23 SEP	26 SEP 64	
- 1	COSMOS 46	885	USSR	- 1		
1964 0598	EXDI GOED 21	886 9 0 0 0	USSR	24 SEP	7 OCT 64	
		890	SO	5 00.1		
	COSMOS \$7	891	USSR		7 DCT 64	
		892	USSR	6 OCT		
1964 0620		894	NKKU 110 SB	130 4	12 007 44	
		696	ASSU.			
l	VOSKHOD 1	<b>\$06</b>	USSR			
		905	USSR			
1964 0650	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	906	USSR	12 OCT	13 OCT 64	
	cuanta 48	606	USSR	1		
		910	USSR		16 OCT 64	
1964 067A		911	S		49 ADN 4	
1964 0698		914	811	23 001	1	
		916	us			
		916	SN		29 OCT 64	
	CDSMOS 49	913	USSR		21 AUG 65	
1964 0698		116	X2.50	24 UC1	10 FEB 65	
1	COSMUS 50	919	USSR	•	ı	
- 1		920	USSR	28 DCT		뉙
1964 0700		928	USSK	28 UCT	15 NOV 64	
1		989	USSR	28 OCT		
- 1		990	USSR	28 DCI	ł	
		991	USSR	28 OCT	8 NOV 64	
1964 070 H		266	1558		ı	
		994	USSR	28 OCT	13 NDV 64	
		366	USSR			
- 1		996	NS.CO.			
1964 070N		166	USSR	28 DCT	10 NOV 64	
		666	USSR			
- 1		1003	USSB	28 001	AND AL	
1964 0705 1964 0701		1005	USSR		12 NDV 64	
L						

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		DECAYED DBJECTS				
INTER-		CATALDS				
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1964 LAUNCHES (CONT.)	1.)					
i		1006	USSR	28 OCT	12 NOV 64	
1964 0704		1007	USSR	Ь	AOX 6	
1964 070X		1008	USSR		Ş	
		1010	USSR	28 OCT	NOV N	
-		101	USSR	28 OCT		
1964 070AA		1012	USSR	ı	_ [	
- 1		1014	ASSI		MOK	
1		1016	USSR	28 OCT	NO NO	
*		1016	USSR	28 DCT	NOV 64	
- 1		1017	usse	28 OCT	NOV.	
1956 070AL		1018	USSR			
		1020	85511			
		102	ASSII	28 OCT	13 NOV 64	
1964 070AL		1022	USSR		VON	
-		1024	USSR		- 1	
		1025	ASSII	28 OCT	13 NOV 64	
1964 070AR		1026	USSR		Ş	
_		1028	USSR	28 OCT	13 NOV 64	
1964 070AU		1030	BSSI	28 OCT	NON	
-		1031	955H			
1964 070AH		1032	USSR		VOV	00 / N
		1034	USSR	28 001	O NUN OF	
- [		1035	USSR	þ	MON	
1964 0708A		1036	USSR	28 OCT	VOV	/n }\
		1038	USSR	28 OCT	NOK Y	
- [		1039	usse		13 NOV 64	Ų.
1964 070BE		1040	USSR		VOV	
		1042	USSR	- 1	13 NOV 64	
1966 0708 1		1047	ASSIT		XOX	
1964 070BK		1045	USSR		N N	
		1046	USSR	28 OCT	12 NOV 64	
		1047	USSR	•	NOV	
1964 07080		1048	USSR		NO O	
-		1050	USSR	28 OCT	I NOV 64	
1966 07088		1051	USSR		NOV	
1964 07081		1053	USSR	28 OCT	VOV	
		1054	USSR		1	
1964 C708V		1055	ASSII	28 OCT	11 NOV 64	

110N NAME  JUCHES (CONT.)  38M  38M  38M  38M  38M  38M  38M  38							
CONTRICTED   CON	DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1056   1057   1058	LAUNCHES	•					
OTOTIONAL         LIGGE         UISSR         28 DCT         11 NINA           OTOTORIA         1055         UISSR         28 DCT         11 NINA           OTOTORIA         1060         UISSR         28 DCT         11 NINA           OTOZOCA         1070         UISSR         28 DCT			1056	USSR	1	1_	
OTOGEN         10558         USSR         28 DCT         13 NOV           01702A         10500         1053R         28 DCT         13 NOV           0170CA         10600         1053R         28 DCT         10 NOV           020CC         1064         1053R         28 DCT         11 NOV           020CC         1066         1053R         28 DCT         11 NOV           020CC         1066         1053R         28 DCT         11 NOV           020CC         107C         1070         1058R         28 DCT         13 NOV           020CC         107C			1057	USSR		NDX.	
1972   1975			1058	USSR		200	
0.70.CG         100.0         105.0         <	- 1		1059	NS.ZL	1		
01002         USSR         28 DCT         11 NND           01002         USSR         28 DCT         11 NND           01002         USSR         28 DCT         11 NND           01002         USSR         28 DCT         11 NND           01002         USSR         28 DCT         11 NND           01002         USSR         28 DCT         11 NND           01002         USSR         28 DCT         11 NND           01002         USSR         28 DCT         11 NND           01002         USSR         28 DCT         11 NND           01002         USSR         28 DCT         11 NND           01002         USSR         28 DCT         11 NND           01002         USSR         28 DCT         11 NND           01002         USSR         28 DCT         11 NND           01002         USSR         28 DCT         11 NND           01003         USSR         28 DCT         11 NND           01003         USSR         28 DCT         11 NND           01004         USSR         28 DCT         11 NND           01004         USSR         28 DCT         11 NND           01004 </td <td></td> <td></td> <td>1060</td> <td>0000 0000</td> <td></td> <td>) N</td> <td></td>			1060	0000 0000		) N	
10.05   10.0	1		1062	USSR		AON	
0720E         1064         USSR         28 DCT         15 NO           0720E         1066         USSR         28 DCT         15 NO           0720E         1066         USSR         28 DCT         11 NO           0720E         1070         USSR         28 DCT         11 NO           070E         1070         USSR         28 DCT         13 NO           070E         1070         USSR         28 DCT         13 NO           070E         1070         USSR         28 DCT         13 NO           070E         1070         USSR         28 DCT         13 NO           070E         1070         USSR         28 DCT         13 NO           070E         1070         USSR         28 DCT         13 NO           070E         1070	- 1		1063	USSR		ğ	
OTOCK         1065         USSN         28 DCT         11 NOT           OTOCK         1066         USSN         28 DCT         11 NOT           OTOCK         1066         USSN         28 DCT         17 NOT           OTOCK         1070         USSN         28 DCT         17 NOT           OTOCK         1071         USSN         28 DCT         17 NOT           OTOCK         1071         USSN         28 DCT         17 NOT           OTOCK         1076         USSN         28 DCT         17 NOT           OTOCK         1076         USSN         28 DCT         17 NOT           OTOCK         1076         USSN         28 DCT         13 NOT           OTOCK         1076         USSN         28 DCT         13 NOT           OTOCK         1076         USSN         28 DCT         13 NOT           OTOCK         1070         USSN         28 DCT         13 NOT           OTOCK         1070         USSN         28 DCT         11 NOT           OTOCK         1070         USSN         28 DCT         11 NOT           OTOCK         1070         USSN         28 DCT         11 NOT           OTOCK			1064	USSR		200	
0.70 CC         1,000         <	H		1065	355U		2	
OTOCCA         1068         USSR         28 OCT         14 MIV           OTOCCA         1070         USSR         28 OCT         13 MIV           OTOCCA         1071         USSR         28 OCT         13 MIV           OTOCCA         1072         USSR         28 OCT         11 NIV           OTOCCA         1074         USSR         28 OCT         13 MIV           OTOCCA         1076         USSR         28 OCT         13 MIV           OTOCCA         1076         USSR         28 OCT         11 MIV           OTOCCA         1070         USSR         28 OCT         11 MIV           OTOCCA         1080         USSR         28 OCT         11 MIV           OTOCA         1080         USSR         28 OCT         11 MIV <td< td=""><td></td><td></td><td>1000</td><td>ASS TO</td><td></td><td>NDV</td><td></td></td<>			1000	ASS TO		NDV	
OTOCK         10069         UISSR         28 DET         16 MIV           OTOCK         1072         UISSR         28 DET         12 MIV           OTOCK         1072         UISSR         28 DET         12 MIV           OTOCK         1074         UISSR         28 DET         12 MIV           OTOCK         1075         UISSR         28 DET         12 MIV           OTOCK         1075         UISSR         28 DET         13 MIV           OTOCK         1076         UISSR         28 DET         13 MIV           OTOCK         1076         UISSR         28 DET         13 MIV           OTOCK         1076         UISSR         28 DET         13 MIV           OTOCK         1070         UISSR         28 DET         11 MIV           OTOCK         1080         UISSR         28 DET         11 MIV           OTOCK         1082         UISSR         28 DET         11 MIV           OTOCK         1083         UISSR         28 DET         11 MIV           OTOCK         1074         UISSR         28 DET         11 MIV           OTOCK         072         UISSR         28 DET         11 MIV <t< td=""><td>i</td><td></td><td>1068</td><td>USSR</td><td>1</td><td></td><td></td></t<>	i		1068	USSR	1		
OTOCL         OTOCL         USSR         28 OCT         13 NUY           OTOCH         1072         USSR         28 OCT         13 NUY           OTOCH         1072         USSR         28 OCT         10 NUY           OTOCH         1074         USSR         28 OCT         11 NUY           OTOCH         1076         USSR         28 OCT         13 NUY           OTOCH         1078         USSR         28 OCT         13 NUY           OTOCH         1078         USSR         28 OCT         11 NUY           OTOCH         1078         USSR         28 OCT         11 NUY           OTOCH         1078         USSR         28 OCT         11 NUY           OTOCH         1080         USSR         28 OCT         11 NUY           OTOCH			1069	ussr		·	
OTOCH         LOST         LISSR         28 DET         12 NA           OTOCH         1072         USSR         28 DET         12 NA           OTOCH         1076         USSR         28 DET         12 NA           OTOCH         1076         USSR         28 DET         13 NA           OTOCH         1076         USSR         28 DET         13 NA           OTOCH         1076         USSR         28 DET         13 NA           OTOCH         1076         USSR         28 DET         13 NA           OTOCH         1070         USSR         28 DET         13 NA           OTOCH         1080         USSR         28 DET         13 NA           OTOCH         1081         USSR         28 DET         11 NA           OTOCH         1083         USSR         28 DET         11 NA           OTOCH         1084         USSR         28 DET         11 NA           OTOCH         1083         USSR         28 DET         11 NA           OTOCH         1084         USSR         28 DET         11 NA           OTOCH         1084         USSR         28 DET         11 NA           OTOCH         1075	1		1070	USSR		NO.	
OTOCK         USSR         28 UCT         10 NV           OTOCK         LUSSR         28 UCT         10 NV           OTOCK         LUSSR         28 UCT         10 NV           OTOCK         LUSSR         28 UCT         13 NDV           OTOCK         LUSSR         28 UCT         11 NDV           OTOCK         LUSSR         28 UCT         11 NDV           OTOCK         LUSSR         28 UCT         11 NDV           OTOCK         LUSSR         28 UCT         11 NDV           OTOCK         LUSSR         28 UCT         11 NDV           OTOCK         LUSSR         28 UCT         11 NDV           OTOCK         LUSSR         28 UCT         11 NDV           OTOCK         LUSSR         28 UCT         11 NDV           OTOCK         LUSSR         28 UCT         11 NDV           OTOCK         LUSSR         28 UCT         11 NDV           OTOCK         LUSSR         28 UCT         11 NDV	- 1		1071	USSR		A S	
OTOCK         UTAL         USSR         28 DCT         13 NOV           0200CB         1075         1075         1058         28 DCT         13 NOV           0200CC         1076         1078         1058         28 DCT         13 NOV           0200CU         1078         1078         28 DCT         14 NOV           070CU         1080         1058         28 DCT         12 NOV           070CU         1080         1058         28 DCT         17 NOV           070CU         1081         1058         28 DCT         17 NOV           070CU         1083         1058         28 DCT         11 NOV           070CU         1084         1058         28 DCT         11 NOV           070CU         1084         1058         28 DCT         11 NOV           071A         1084         1058         28 DCT         11 NOV           071A         1070         1058         28 DCT         11 NOV           071A         2072         105         4 NOV         20 DCT           072C         1072         1084         105         4 NOV         20 DCT           074A         EXPLORER 23         374         105			1072	USSR			
0.70CQ         1074         1055R         28 DCT         15 ND           0.70CQ         1076         1058R         28 DCT         13 ND           0.70CQ         1070         1078         28 DCT         13 ND           0.70CQ         1070         1079         1058R         28 DCT         12 ND           0.70CQ         1080         1058         28 DCT         12 ND           0.70CQ         1081         1082         28 DCT         11 ND           0.70CQ         1084         1058         28 DCT         11 ND           0.72C         1084         1058         28 DCT         11 ND           0.72C         1072         10         11 ND         28 DCT         11 ND           0.72C         10.72         11 ND         28 DCT         11 ND         20 DCT           0.74C         EXPLORER 23         3.24         10.2	- 1		1073	Nest 1933:		1	
OTOCK         1076         USSR         28 OCT         13 NOV           0700CJ         1076         USSR         28 OCT         14 NOV           0700CJ         1076         USSR         28 OCT         12 NOV           0700CJ         1080         USSR         28 OCT         17 NOV           0700CJ         1082         USSR         28 OCT         17 NOV           0700CJ         1082         USSR         28 OCT         11 NOV           0700CJ         1083         USSR         28 OCT         11 NOV           0700CJ         1084         USSR         28 OCT         11 NOV           0710A         922         USSR         28 OCT         11 NOV           0710A         922         USSR         28 OCT         11 NOV           0710A         924         USSR         28 OCT         11 NOV           0710A         924         USSR         28 OCT         11 NOV           071A         924         USSR         4 NOV         20 JUN           074B         924         USSR         4 NOV         20 JUN           074C         674         USSR         4 NOV         20 JUN           074 <t< td=""><td></td><td></td><td>4/01</td><td>35.00 100.00</td><td></td><td></td><td></td></t<>			4/01	35.00 100.00			
OTOCIO         OTOCIO         LISSR         28 DCT         15 MOY           OTOCIO         1076         1078         1058         28 DCT         12 MOY           OTOCIO         1080         USSR         28 DCT         12 NOY           OTOCIO         1081         USSR         28 DCT         17 NOY           OTOCIO         1082         USSR         28 DCT         17 NOY           OTOCIO         1084         USSR         28 DCT         11 NOY           OTOCIO         1084         USSR         28 DCT         11 NOY           OTOCIO         922         USSR         4 NOY         29 LIN           OTOCIO         924         USSR         4 NOY         29 LIN           OTOCIO         0TOCI         USSR         4 NOY         29 LIN	1		1076	11558		1	
OTOCU         LOTOR         LUSSR         28 OCT         12 NOV           OTOCU         10070         USSR         28 OCT         17 NOV           OTOCC         10081         USSR         28 OCT         11 NOV           OTOCY         10082         USSR         28 OCT         11 NOV           OTOCY         10084         USSR         28 OCT         11 NOV           OTOC         922         US         4 NOV         5 NOV           OTOC         922         US         4 NOV         5 NOV           OTOC         924         US         4 NOV         5 NOV           OTOC         924         US         4 NOV         29 JUN           OTOC         924         US         4 NOV         29 JUN           OTOC         0TAC         US         4 NOV         29 JUN           OTAC         0TAC         US         6 NOV         29 JUN           OTAC         0TAC <td< td=""><td></td><td></td><td>1077</td><td>USSR</td><td></td><td></td><td></td></td<>			1077	USSR			
OTOCK         DISSR         28 DCT         12 NDV           OTOCK         LISSR         28 DCT         17 NDV           OTOCK         LISSR         28 DCT         11 NDV           OTOCX         LISSR         28 DCT         11 NDV         28 DCT         11 NDV           OTOCX         QTAC         LISSR         4 NDV         29 LDT         4 NDV         29 LDT           OTAC         QTAC         LISSR         4 NDV         29 LDT         4 NDV         29 LDT           OTAC         QTAC         QTAC         QTAC         QTAC         QTAC         QTAC	1		1078	USSR			
OFOCK         USSR         28 DCT         17 NUV           OFOCK         1080         USSR         28 DCT         11 NUV           OFOCK         1083         USSR         28 DCT         11 NUV           OFOCK         1084         USSR         28 DCT         11 NUV           OFODA         1084         USSR         28 DCT         11 NUV           OFODA         1084         USSR         28 DCT         11 NUV           OFOTO         1084         USSR         28 DCT         11 NUV           OFOTO         922         USSR         28 DCT         11 NUV           OFOTO         925         USSR         28 DCT         11 NUV           OFOTO         925         USSR         28 DCT         11 NUV           OFOTO         925         USSR         4 NUV         29 DCT         11 NUV           OFOTO         925         USSR         4 NUV         29 DCT         11 NUV         29 DCT           OFOTO         924         USSR         4 NUV         29 DCT         10N         29 DCT           OFOTO         924         USSR         6 NUV         29 DCT         10N         20 DCT           OFOTO			1079	USSR		- 1	
OTODCX         OTODCX         OTOD         OTOD           0700CY         1083         USSR         28 OCT         11 NDV           0700CY         1084         USSR         28 OCT         11 NDV           0700A         1084         USSR         28 OCT         11 NDV           071A         922         US         4 NDV         2 NDV           072B         925         US         4 NDV         2 DCT           072C         927         US         4 NDV         2 DCT           072C         927         US         4 NDV         2 DCT           074C         927         US         6 NDV         29 JUN           074C         6731         US         6 NDV         29 JUN           074C         6731         US         6 NDV         29 JUN           074C         6732         US         6 NDV         29 JUN           074C         6732         US         6 NDV         29 JUN           074C         6732         US         6 NDV         29 JUN           074B         6734         US         10 NDV         29 NDV           076C         936         US         21 NDV <td< td=""><td></td><td></td><td>1080</td><td>USSR</td><td></td><td></td><td></td></td<>			1080	USSR			
070CY         10882         USSR         28 DCT         11 NOV           070CZ         10843         USSR         28 DCT         11 NOV           0710A         1084         USSR         28 DCT         11 NOV           0710A         922         US         4 NOV         28 NOV           072B         925         US         4 NOV         2 NOV           072C         926         US         4 NOV         30 JUN           072D         927         US         4 NOV         30 JUN           074C         927         US         4 NOV         30 JUN           074C         927         US         6 NOV         29 JUN           074C         4019         US         6 NOV         29 JUN           074C         473         US         6 NOV         29 JUN           074C         473         US         6 NOV         29 JUN           074C         473         US         51 NOV         29 JUN           076B         574         US         21 NOV         22 LNO           076C         934         US         21 NOV         22 LNO           076C         937         US         21 N	- 1		1081	Negation 1			
OTODICA         1084         USSR         28 OCT         11 NOV           0720A         0720A         US         2 NOV         28 NOV           072A         072A         US         4 NOV         2 NOV           072B         072B         US         4 NOV         30 JUN           072C         072C         US         4 NOV         30 JUN           07A B         272 B         US         6 NOV         29 JUN           07A B         273 B         US         6 NOV         29 JUN           07A B         074 B         0.0 B         0.0 B         0.0 B         0.0 B           07A B         0.0 B         0.0 B         0.0 B         0.0 B         0.0 B         0.0 B           07A B         0.0 B<			1082	055K			
0770A         0770A <th< td=""><td></td><td></td><td>4001</td><td>115.50</td><td></td><td>•</td><td></td></th<>			4001	115.50		•	
072A         922         US         4 NOV         5 NOV           072B         US         4 NOV         2 OLT           072C         926         US         4 NOV         30 JUN           072B         US         4 NOV         30 JUN           074A         EXPLORER 23         3747         US         6 NOV         29 JUN           074C         6731         US         6 NOV         13 JUN           074C         6731         US         6 NOV         29 JUN           074C         6732         US         6 NOV         29 JUN           074B         075A         US         6 NOV         29 JUN           076A         EXPLORER 24         931         US         21 NOV         29 JUN           076A         EXPLORER 24         934         US         21 NOV         29 NOV           076A         EXPLORER 24         934         US         21 NOV         29 NOV           076B         EXPLORER 24         934         US         21 NOV         29 NOV           076C         POSTO         US         21 NOV         29 NOV         20 NOV           076A         US         21 NOV         21 NOV			921	2550		NDV	
072C         US         4 NOV         30 JUN           072C         US         4 NOV         30 JUN           072C         US         6 NOV         29 JUN           072A         US         6 NOV         29 JUN           074A         EXPLORER 23         3747         US         6 NOV         29 JUN           074B         074C         4019         US         6 NOV         29 JUN           074C         6731         US         6 NOV         29 JUN           074E         931         US         6 NOV         29 JUN           075A         EXPLORER 24         931         US         21 NOV         29 JUN           076A         EXPLORER 24         931         US         21 NOV         29 HAY           076A         EXPLORER 24         934         US         21 NOV         29 HAY           076B         US         21 NOV         29 HAY         21 NOV         29 HAY           076C         US         21 NOV         21 NOV         21 NOV         22 HAR           076B         US         21 NOV         21 NOV         21 NOV         21 NOV           076H         US         21 NOV         21 NOV<			922	SO	AON &	NON I	
072C         926         US         4 NOV         30 JUN           072D         US         4 NOV         30 JUN         30 JUN           074A         EXPLORER 23         3747         US         6 NOV         29 JUN           074B         4019         US         6 NOV         29 JUN           074C         6731         US         6 NOV         13 JUN           074C         6731         US         6 NOV         29 JUN           074C         6731         US         6 NOV         29 JUN           075A         US         6 NOV         29 JUN           075A         US         6 NOV         29 JUN           075A         US         21 NOV         29 MAY           076B         931         US         21 NOV         29 MAY           076G         935         US         21 NOV         30 APR           076G         937         US         21 NOV         22 NOV           076J         US         21 NOV         21 NOV         21 NOV           076J         US         21 NOV         21 NOV         21 NOV           076H         076H         076H         076H         076H		***************************************	925	NS.	A NOV		
UZZD         EXPLORER 23         924         US         6 NOV         29 JUN           074A         EXPLORER 23         3747         US         6 NOV         13 JUN           074B         6731         US         6 NOV         13 JUN           074C         6731         US         6 NOV         13 JUN           074C         930         US         6 NOV         2 JAN           075A         931         US         21 NOV         29 MAY           076B         934         US         21 NOV         28 MAY           076C         935         US         21 NOV         28 MAY           076C         935         US         21 NOV         28 MAY           076C         935         US         21 NOV         3 APR           076J         937         US         21 NOV         3 APR           076J         937         US         21 NOV         22 FEB           076J         US         21 NOV         21 NOV         22 FEB           076J         1411         0.S         21 NOV         21 NOV           076H         940         0.S         21 NOV         21 NOV           076H			926	2 5			
074A         EAPLUKER 23         3747         US         6 NDV         13 JUN           074B         6019         US         6 NDV         13 JUN           074C         6731         US         6 NDV         2 JAN           074C         6732         US         6 NDV         2 JAN           075A         US         18 NDV         6 NEC         2 JAN           075A         US         21 NDV         29 NDV         2 DCT           076B         934         US         21 NDV         28 NAY           076C         US         21 NDV         20 NDV         20 NDV           076C         US         21 NDV         3 APR           076G         US         21 NDV         30 APR           076J         US         21 NDV         22 FEB           076J         US         21 NDV         22 RBA           076J         US         21 NDV         24 NBR           076J         US         21 NDV         22 NBA           076J         US         21 NDV         21 NDV           076J         US         21 NDV         21 NDV           076J         US         21 NDV         21 NDV	uzzn		776	511		NOT	
074C         4019         US         6 NOV         15 JUL           074C         6731         US         6 NOV         2 JAN           074C         930         US         2 JAN         2 JAN           075A         US         21 NOV         29 HAY           075A         US         21 NOV         2 DCT           076E         935         US         21 NOV         28 HAY           076F         936         US         21 NOV         28 HAY           076G         937         US         21 NOV         28 HAY           076G         937         US         21 NOV         19 APR           076J         US         21 NOV         22 FEB           076J         US         21 NOV         22 FEB           076J         US         21 NOV         22 NOV           076J         US         21 NOV         21 NOV           076H         076H         US         21 NOV         21 NOV           076H         076H         US         21 NOV         21 NOV           076H         076H         US         21 NOV         13 HAR	<b>4 * /</b> 0		1916	Sn	VON 9	NA	
074D         6731         US         6 NOV         2 JAN           074E         6732         US         6 NOV         29 HAY           075A         US         21 NOV         29 HAY           076D         934         US         21 NOV         2 DCT           076E         935         US         21 NOV         28 HAY           076E         935         US         21 NOV         28 HAY           076G         937         US         21 NOV         3 APR           076G         937         US         21 NOV         30 APR           076J         US         21 NOV         22 FEB           076J         US         21 NOV         22 FEB           076J         US         21 NOV         22 FEB           076J         US         21 NOV         21 NOV           076J         US         21 NOV         21 NOV           076H         075H         US         21 NOV         21 NOV           076H         076H         US         21 NOV         21 NOV           076H         075H         US         21 NOV         13 HAR	I.		4019	Sn	ADN 9	<u>ار</u>	
074E         6732         US         6 NOV         29 HAY           075A         EXPLORER 24         931         US         21 NOV         29 HAY           076A         EXPLORER 24         934         US         21 NOV         28 HAY           076F         935         US         21 NOV         28 HAY           076G         937         US         21 NOV         28 HAY           076J         937         US         21 NOV         3 APR           076J         US         21 NOV         30 APR           076J         US         21 NOV         22 FB           076J         US         21 NOV         22 FB           076J         US         21 NOV         22 RAR           076J         US         21 NOV         22 RAR           076J         US         21 NOV         21 NOV           076H         050         US         21 NOV         21 NOV           076H         050         US         21 NOV         21 NOV           076H         050         US         21 NOV         13 HAR			6731	US			
075A         EXPLORER 24         930         US         1H NUV         B UEL           076A         EXPLORER 24         931         US         21 NOV         28 MAY           076E         934         US         21 NOV         28 MAY           076F         936         US         21 NOV         28 MAY           076G         937         US         21 NOV         19 APR           076J         937         US         21 NOV         30 APR           076J         US         21 NOV         22 FEB           076J         US         21 NOV         22 FEB           076J         US         21 NOV         22 NAR           076J         US         21 NOV         21 NOV         21 NOV           076J         US         21 NOV         21 NOV         21 NOV           076H         US         21 NOV         21 NOV         21 NOV	ł .		6732	Sn			
G76A         EXPLORER 24         931         US         21 NDV         20 NDV         20 NDV         20 NDV         28 MAY           076E         936         US         21 NDV         28 MAY         3 APR           076F         937         US         21 NDV         19 APR           076J         939         US         21 NDV         30 APR           076J         US         21 NDV         22 FEB           076J         US         21 NDV         22 FEB           076J         US         21 NDV         21 NDV         22 FEB           076J         US         21 NDV         21 NDV         21 NDV           076J         US         21 NDV         21 NDV         21 NDV           076J         US         21 NDV         21 NDV         21 NDV	075A		930	Su .	- 1		
0760         934         935         US         21 NOV         28 HAY           076E         936         US         21 NOV         3 APR           076F         937         US         21 NOV         19 APR           076J         939         US         21 NOV         22 FEB           076J         941         US         21 NOV         22 FEB           076J         1411         US         21 NOV         5 MAR           076H         4079         US         21 NOV         21 OCT           076H         940         US         21 NOV         21 NOV         13 MAR	C76A		931	\$ 0 T		בים בים	
276E         935         US         21 NOV         3 APR           026F         036         US         21 NOV         19 APR           076G         937         US         21 NOV         30 APR           076J         941         US         21 NOV         22 FEB           076J         1411         US         21 NOV         5 MAR           076H         4079         US         21 NOV         21 OCT           076H         4079         US         21 NOV         21 OCT           076H         4079         US         21 NOV         13 MAR	- 1		434	811		Α¥	
076G         937         US         21 NDV         19 APR           076H         939         US         21 NDV         30 APR           076J         941         US         21 NDV         22 FEB           076J         US         21 NDV         5 MAR           076J         US         21 NDV         21 OCT           076H         05         21 NDV         21 OCT           076H         05         21 NDV         13 MAR			936	US		APR	
076H         939         US         21 NUV         34 AR           076J         941         US         21 NUV         22 FEB           076J         1411         US         21 NUV         5 HAR           076H         4079         US         21 NUV         21 OCT           076H         4079         US         21 NUV         21 OCT           040         US         21 NUV         13 HAR	1		937	SN		A PR	
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- 1		1104	USSR		ABB	
		1105	USSR		25 FEB 65	
		1106	3550	- 1	A S	
1965 012K		1108	USSK	22 FEB	25 MAK 65	
ŀ		1109	USSR		1	
		1110	USSR	22 FEB	FEB	
ŀ		1111	USSR		2 HAR 65	
- 1		1112	USSR	- 1	- 1	
		1113	USSR			
1965 0125		1114	USSR	22 FEB	HAR	
		1115	USSR	22 FEB		
		giii	NCCU 033E		2 AAR 02	
1965 012V		1118	X250	22 FEB	1 MAR 65	
1		1119	USSR		ı	
		1120	USSR	22 FEB	- 1	
		1121	USSR			
1965 012AA		1122	USSR		HAR	
		1123	USSR	22 FEB		
		1124	USSR		-	
		1125	3550 8551	22 FEB	2 HAR 02	
		1127	ACCU		28 FFR 65	
1965 U12AF 1965 G12AG		1128	USSR	22 FEB		
		1129	USSR		5 MAR 65	
- 1		1130	USSR	- 1	- 1	
		1131	USSR	22 FEB		
		1132	3850		21 MAP 45	
1965 012AM		1135	0.53K	22 FFB	MAR	
1965 01240		1135	USSR	ŧ	MAR	
		1136	USSR	22 FEB	- 1	
1		1137	USSR	22 FEB		
		1138	USSR	- 1	HAR	
ì		1139	USSR		MAR	
		1140	USSR	- 1	a i	
_		1.61	SSS	22 FEB	10 MAR 65	
- 1		1142	USSK		N N	
		1.45	X 6 0 0 0	22 FEB	Z Z Z	
1965 012AT		1165	85511	1	MAR	
		C+11	4550			

		1		XX		
	4 MAR 65	22 FEB	USSR	1198		106 5 51 50 C
	21 HAR 65	22 EEB	USSR	1197	A	ŀ
	MAR	22 FE8	USSR	1196	C2	0
	MAR	22 FEB	ASSA	1195	<b>C</b> *	ł
		22 FEB	USSR	1194	CX	o
	1	22 FEB	ASSU	1190	2	1965 0120
	1 MAR 65	22 FEB	USSR	1189	CY	1965 012CV
		22 FEB	USSR	1188	CU	P
	- 1	22 FEB	USSR	1187	CT	
	MAR	22 EEB	ASSII	1186	CS	1965 01268
	11 MAR 65	22 FEB	USSR	1185	£ .	
	MAR	27 FER	USSB	1184	CQ	1965 012CQ
	1	22 FEB	USSR	1183	CP	
	7 MAR 65	22 FEB	ASSN	1182	CZ	1965 012CN
	II A	22 FEB	USSR	1181	CI	1965 012CH
	HAR	22 FEB	ASSA	1180		b
	16 MAR 65	22 FEB	USSR	1179		_
	S MAR	22 EEB	assn	1178		ı
		22 FEB	USSR	1117		2
	MAR	22 FEB	NACT.	11/6		
	5 NAR 65	22 FEB	CSSR	1175	707	2 0
	MAK	22 +58	3660			ı
	◆ MAR 65	22 FEB	COUR	1176		
	AAK	22 FEB	2008	1172		- 1
	5 MAR 65	22 FEB		1173		307 01260
	MAR	22 FEB	1665	1171	T B	- 1
	5 MAR 65	22 FE8	USSR	1169	82	1965 0126 <b>2</b>
		22 FEB	ASSU	1168	84	- 1
		22 FEB	USSR	1167	BX	-
	MAR	22 EE8	assn	1166		1
		22 FEB	USSR	1165	: <b>V</b>	
	1	22 EEB	ASSII	1164		-1
		22 FEB	USSR	1163	81	
	MAR	22 FEB	assn	1162	85	
		22 FEB	USSR	1161	50 R	
	MAR.	22 EEB	ASSII	1160	6.0	1965 01280
		22 FE8	USSR	1159	8P	1965 012BP
	MAR	22 FEB	assn	1158	BN	1965 0128N
		22 FEB	USSR	1157	8M	
	1	22 FEB	assn	1156	<b>4</b>	
		22 FEB	USSR	1155	8K	
		22 EEB	BSSII	1156	8.1	1965 01281
	H A R	22 FEB	USSR	1153	Bri	1965 012BH
	MAR	22 EEB	ASSII	1152	BC	1965 012BC
	i	22 FEB	USSR	1151	OFF CONTRACTOR	1965 012bF
	17 MAR 65	22 FEB	ASSII	1150	86	1965 0128E
	MAR	22 FFR	USSR	1149	8D	1965 01280
	10 1377 CU	אל יונס	1550	1148	ac .	ì
	6	22 ECB	HSSE	1147	₿₿	1965 01:288
					LAUNCHES (CONT.)	1965 LAUI
NOTE	DEÇAY	LAUNCH	SOURCE	NUMBER	ION NAME	DESIGNATION
				CATALOG		NATIUNAL

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MATTOMAL		CATALOG				
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	OĘCAY	NOTES
1965 LAUNCHES (CONT.)						
		1200	USSR	22 FEB	11 MAR 65	
1965 0120E		1202	USSR			
- 1		1203	USSR	- 1	MAR	
		1204	USSR	22 FEB	MAR	
-		1205	USSR	ı	9 MAR 65	
1965 0120K		1209	USSR		MAR	
1		1210	USSR	22 FEB	MAR	
- 1		1211	USSR		HAR	
		1212	USSK	22 FEB	14 MAR 65	
1965 01208		1214	USSR			
		1215	USSR			
		1216	USSR	22 FEB	HAR	
1965 01260		1217	USSR		MAR	
		1218	USSK	22 FEB	20 MAK 05	
1		1220	1558		MAR	
1965 U12UA		1221	USSR	22 FEB	HAR 6	
		1222	USSR			
		1223	USSR		HAR	
_		1224	USSR	22 FEB	16 MAR 65	
- 1		1225	3550		10 MAD AS	
1965 CIZED		1220	0335 1358	22 FEB	1	
1		1229	USSR	22 FEB	1	
		1230	ussr		MAR	
		1231	USSR	23 FEB		
- 1		1232	USSR		20 MAR 02	
		1233 233	000 E	23 FEB		
		1235	USSR		ı	
1965 012EN		1236	USSR		- 1	
i .		1237	USSR	23 FEB	20 MAR 65	
		1238	USSR	23 650		
0		1239	3550 3550	23 FEB		
Ł		1241	USSR	23 FEB	į	
1965 012EH		1242	USSR	ł	- 1	
١.		1243	USSR	23 FEB	HAR	
		1254	USSR	- 1	- 1	
		1255	USSR	23 FEB	20 MAR 65	
1965 012EY 1945 012EZ		1257	USSR	1	i	
		1258	USSR	- 1	17 MAR 65	
١		1261	USSR	23 FEB	6 APR 65	
1965 012FC		1262	USSK	23 FEB	21 MAD 45	
		1263	USSK		K	

6122FF         1265         USSR         23 FEB         15           6122FF         1265         USSR         23 FEB         15           6122FF         1265         USSR         23 FEB         15           6122FF         1265         USSR         23 FEB         21           6122FF         1276         USSR         23 FEB         21           6122FF         1277         USSR         23 FEB         21           6122FF         1277         USSR         23 FEB         21           6122FF         1278         1278         USSR         23 FEB         21           6122FF         1278         1278         USSR         23 FEB         21           6122F         1278         1278         USSR         23 FEB         21           6122F         1278         1279         USSR         23 FEB         23           6122F         1278         1279         USSR         23 FEB         24           6122F         1279         USSR         23 FEB         27           6122F         1279         USSR         23 FEB         27           6122F         1279         USSR         23 FEB	DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY
17.12FF   12.55   17.52R   23 FEB   25 MAR   23 FEB   25 MAR   23 FEB   25 MAR   23 FEB   25 MAR   23 FEB   25 MAR   23 FEB   25 MAR   23 FEB   25 MAR   23 FEB   25 MAR   23 FEB   25 MAR   25 FEB   25 MAR   2	1965 LAUNCHE	(CONT.				
11264   1275   1288   23 FEB   21 MR   1275   1288   23 FEB   21 MR   1275   1288   23 FEB   21 MR   1275   1288   23 FEB   20 MR   1275   1288   23 FEB   20 MR   1275   1288   1288   23 FEB   20 MR   1275   1288   1288   23 FEB   20 MR   1275   1288	- 1		1265	USSR	- I	MAR
CLIZER   C	- 1		1288	HANN.	- 1	
OLJER   1277			1276	ASSI		Z A
1226   1228   1238   23 FEB   27 MAR   1270   1287   1288   23 FEB   27 MAR   1289			1277	USSR	1	MAR
1012EF   1281	- 1		1279	USSR		MAR
OLZEP         1281         USSR         23 FEB         19 HAR           OLZER         1283         USSR         23 FEB         21 HAR           OLZER         1283         USSR         23 FEB         21 HAR           OLZER         1283         USSR         23 FEB         23 HAR           OLZER         1295         USSR         23 FEB         23 HAR           OLZER         1295         USSR         23 FEB         20 HAR           OLZER         1297         USSR         23 FEB         20 HAR           OLZER         1297         USSR         23 FEB         20 HAR           OLZER         1297         USSR         23 FEB         20 HAR           OLZER         1290         USSR         23 FEB         20 HAR           OLZER	1		1280	IISSR		X 2 × ×
12   12   12   13   13   13   13   13			1281	USSR		I AR
OLZEFT   1289   1285	- 1		1282	ASSI	- 1	MAR
OLZEFY   1295   USSR   23 FEB   20 MAR   OLZEFY   1297   USSR   23 FEB   20 MAR   OLZEFY   1297   USSR   23 FEB   22 MAR   OLZEFY   1390   USSR   23 FEB   22 MAR   OLZEFY   1390   USSR   23 FEB   23 MAR   OLZEFY   1390   USSR   23 FEB   23 MAR   OLZEFY   1390   USSR   23 FEB   23 MAR   OLZEFY   1390   USSR   23 FEB   23 MAR   OLZEFY   1390   USSR   23 FEB   23 MAR   OLZEFY   1390   USSR   23 FEB   23 MAR   OLZEFY   1390   USSR   23 FEB   23 MAR   OLZEFY   1390   USSR   23 FEB   23 MAR   OLZEFY   1390   USSR   23 FEB   23 MAR   OLZEFY   1390   USSR   23 FEB   23 MAR   OLZEFY   1390   USSR   23 FEB   23 MAR   OLZEFY   1390   USSR   13 MAR   24 FEB   OLZEFY   1390   USSR   13 MAR   13 FEB   OLZEFY   1390   USSR   13 MAR   13 FEB   OLZEFY   1390   USSR   13 MAR   13 FEB   OLZEFY   USSR   13 MAR   13 FEB   OLZEFY   USSR   13 MAR   13 FEB   OLZEFY   USSR   13 MAR   13 FEB   OLZEFY   USSR   13 MAR   13 FEB   OLZEFY   USSR   13 MAR   13 FEB   OLZEFY   USSR   13 MAR   13 FEB   OLZEFY   USSR   13 MAR   13 FEB   OLZEFY   USSR   13 MAR   13 FEB   OLZEFY   USSR   13 MAR   13 FEB   OLZEFY   USSR   13 MAR   13 FEB   OLZEFY   USSR   13 MAR   13 FEB   OLZEFY   USSR   13 MAR   13 FEB   OLZEFY   USSR   13 MAR   13 FEB   OLZEFY   USSR   13 MAR   13 FEB   OLZEFY   USSR   USSR   13 MAR   13 FEB   OLZEFY   USSR	1		1284			3 MAR
125FU   1236   115KR   23 FEB   25 MAR   124 MAR   123	0		1295	USSR		X A
1227   1238   1239   1258   23 FEB   23 HAR   1012FY   12390   1258   23 FEB   23 HAR   1012FY   12390   1258   23 FEB   23 HAR   1012FY   12390   1258   23 FEB   23 HAR   1012FY   12390   1258	- 1		1207	HSSR .		MAR
O12FX   1300	1		1299	LICCO		I I
OLIFE   1309   USSR   23 FEB   28 MAR   1013B   USSR   23 FEB   28 MAR   1013B   USSR   23 FEB   28 MAR   1013B   USSR   23 FEB   28 MAR   1013B   USSR   23 FEB   28 MAR   1013B   USSR   25 FEB   10-11 MAR   1015M   USSR   7 MAR   15 MAR   1015M   1015K   1015			1300	USSR		H AR
OLIAN   COSMOS 59   LIP   COSMOS 59   LIP   COSMOS 59   LIP   COSMOS 59   LIP   COSMOS 59   LIP   COSMOS 59   LIP   COSMOS 59   LIP   COSMOS 59   LIP   COSMOS 59   LIP   COSMOS 59   LIP   COSMOS 60   LIP   CO	- 1		1309	USSR		MAR
OLISH   COSMOS 59   1193   USS   25 FEB   10-11   MAR   1015   MAR   10-11   MAR   1	ŀ		1096	COUR		
O158   O158		COSMOS SO	1193	S	וטו	0-11 MAR
Olog   Surcal   1307   USSB   7 MAR   10 MAR   1310   USSB   11 MAR   27 MAR   10 MAR   27 MAR   10 MAR   27 MAR   10 MAR   27 MAR   10 MAR   27 MAR   10			1192	USSR	- 1	ž R
DITAL NUSS 20030   1300   13	- 1	SHECAL	1207	ussr	1	-11 MAR
O176   SECOR (EGRS) 2   1250   US   11 MAR   26 FEB   O1770   1248   US   11 MAR   A SEB   O1776   1248   US   11 MAR   27 MAR   O1776   O17	1	NASS 30030	1303	118	•	2 A
O170		S	1250	SN		FEB
176   1250   1250   1360   1370   1	- 1		1228	Str	11 MAR	SEP
O17F   1249   US   11 MAR   10 SEP   1017F   1319   US   11 MAR   28 JUN   1017H   1323   US   11 MAR   28 JUN   1017H   1323   US   11 MAR   28 JUN   1018B   US   11 MAR   1320   US   11 MAR   1320   US   12 MAR   1325   US   12 MAR   14 MAR   1252   US   US   US   US   US   US   US   U			1251	ES CS	11 HAR	
17H   1323   US   11 MAR   28 JUN   1323   US   12 MAR   17 MAR   17 MAR   18 JUSSR   12 MAR   17 MAR   17 MAR   18 JUSSR   12 MAR   16 JUSSR   12 MAR   16 JUSSR   12 MAR   16 JUSSR   12 MAR   16 JUSSR   12 MAR   17 MAR   17 MAR   17 MAR   18 JUSSR			1249	Sn	•	SEP
018A         COSMOS 60         1246         USSR         12 MAR         17 MAR           018C         1252         USSR         12 MAR         16-17 MAR           019A         1253         USSR         12 MAR         15 MAR           019A         1259         USSR         12 MAR         17 MAR           019C         COSMOS 61         1260         USSR         15 MAR         21 MAR           020B         COSMOS 62         1268         USSR         15 MAR         24 SEP           020B         COSMOS 63         1270         USSR         15 MAR         24 SEP           020C         COSMOS 63         1270         USSR         15 MAR         24 SEP           020C         COSMOS 63         1270         USSR         15 MAR         24 SEP           020C         USSR         15 MAR         24 SEP         15 MAR         24 JUL           020C         USSR         15 MAR         25 JUL         02SR         15 MAR         20 JUL           020C         1340         1340         USSR         15 MAR         20 APR           020C         1340         1341         USSR         15 MAR         20 APR           020C	- 1		1323	US		
O186   1252   USSR   12 MAR   16-17 MAR   1018C   USSR   12 MAR   15 MAR   15 MAR   1019A   USSR   12 MAR   15 MAR   17 MAR   1019B   USSR   12 MAR   17 MAR   17 MAR   17 MAR   18 M	1	COSMOS 60	1246	USSR	1	
1247   US   12 MAR   17 MAR   17 MAR   17 MAR   17 MAR   17 MAR   17 MAR   17 MAR   18 MAR   19 MAR			1252	USSR		6-17 MAR
O198			1247	US		I A
O20A         COSMOS 61         1267         USSR         15 MAR         21 MAR         21 MAR         15 MAR         15 MAR         15 MAR         15 MAR         24 SEP           020B         COSMOS 62         1268         USSR         15 MAR         24 SEP           020C         COSMOS 63         1270         USSR         15 MAR         3 NOV           020B         1270         USSR         15 MAR         24 JUL           020F         1336         USSR         15 MAR         20 JUL           020F         1338         USSR         15 MAR         20 JUL           020F         1339         USSR         15 MAR         30 APR           020F         1341         USSR         15 MAR         30 APR           020F         1341         USSR         15 MAR         30 APR	- 1		1259	Sn		MAR
0208         COSMOS 62         1268         USSR         15 MAR         24 SEP           020C         CUSMOS 63         1269         USSR         15 MAR         4 NOV           020D         1270         USSR         15 MAR         5 AUG           020F         1336         USSR         15 MAR         24 JUL           020F         1337         USSR         15 MAR         29 SEP           020H         1338         USSR         15 MAR         30 APR           020H         1340         USSR         15 MAR         30 APR           020K         1340         USSR         15 MAR         30 APR           020K         1340         USSR         15 MAR         30 APR	1		1267	ASSI		ZAZ
0200 1270 USSR 15 MAR 5 AUG 0200 1270 USSR 15 MAR 27 JUL 0200 USSR 15 MAR 29 SEP 0200 USSR 15 MAR 29 SEP 0200 USSR 15 MAR 30 APR 0200 USSR 15 MAR 14 OPR 0200 USSR 15 MAR 14 OPR 0200 USSR 15 MAR 14 OPR 0200 USSR 15 MAR 14 OPR 0200 USSR 15 MAR 14 OPR 0200 USSR 15 MAR 14 OPR 0200 USSR 15 MAR 14 OPR 0200 USSR 15 MAR 16 O	0208		1268	USSR		SEP
1336 USSR 15 MAR 29 SEP 0206 1337 USSR 15 MAR 29 SEP 0204 1338 USSR 15 MAR 30 APR 0204 1339 USSR 15 MAR 14 OCT 0206 USSR 15 MAR 14 OCT 0206 USSR 15 MAR 14 OCT 0207 1341 USSR 15 MAR 30 MAY	0200		1270	USSR	Ţ	NO
020G 1337 USSR 15 MAR 29 SEP 020H 1338 USSR 15 MAR 30 APR 020J 1340 USSR 15 MAR 14 DCT 020K 1340 USSR 15 MAR 30 MAY	1		1336	HSSR		٥
020H 1338 USSR 15 MAR 14 DCT 020K 1340 USSR 15 MAR 30 MAY 1340 USSR 15 MAR 30 MAY 1500 15 MAR 30 MAY 1500 15 MAR 30 MAY			1337	USSR	1	SEP
020J 1339 USSR 15 MAR 14 DCT 020K USSR 15 MAR 30 MAY	- 1		1338	nssa	1	APR
1341 ICCO 15 MAR 13 177			1339	USSR		DCT
				Acco.	- 1	A

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DĘCAY	NOTES
1965 LAUNCHES (CUNT.)						
		1343	USSR	15 MAR	20 DEC 66	
1		1344	X220	15 MAR		
1965 UZUK 1965 OZOT		7 P P P P P P P P P P P P P P P P P P P	86.00 E	15 MAR		
١.		1349	USSR	Ι.	APR	
		1350	USSR	15 MAR	DEC	
		1351	USSR	15 MAR	6 AUG 72	
- 1		7651	NCCU.			
		1353	2000 3000 3000 3000	LO HAK	30 JAN 66	
1		1254	115.50		5	
1965 020AA 1965 020AB		1356	X550		V 1	
1		1371	USSR			
		1373	USSR		FEB	
۱. ـ		1375	USSR	15 MAR	14 OCT 65	
		1397	USSR	15 MAR	6 APR 68	
_		1398	USSR		N S S	
1965 020AL		1400	USSR	15 MAR	5 DCI 65	
		1401	USSR		20 MAR 66	
		1402	USSR	15 MAR	5 MAY 67	
1965 020AP		1403	USSR	15 MAR	DEC	
1965 02040		1409	USSR		Ä	
1965 020AR		1410	USSR	15 MAR		
- 1		1916	USSR		A S	
		1417	S S S S S S S S S S S S S S S S S S S	LO MAK	4 SEP 05	
- 1		1918	35511	•	58 SHE T	
		1419	8000 E	LO TAR	MAY	
- 1		16.27	ASSI		5	
1965 UZUAA		143	8000	15 HAR		
1		1439	USSR		NYO	
		1476	USSR	1		
١		1481	USSR	15 MAR	23 MAY 79	
		1482	USSR	- 1	NAL	
		1483	USSP	15 MAR	FEB	
1965 020BJ	***************************************	1484	USSR	- 1	ä	
1965 0238K		1485	USSR	15 MAR	APR	
1965 020BI		1486	USSR	ŧ		
1965 020BM		1487	USSR		APR	
1965 020BM		1488	USSR	ı	AON	
1965 0208P		1489	USSR	15 MAR	5	
1965 02089		1490	USSR	-1	Z	
		1491	USSR			
1965 0208S		1492	USSK	1		
		1493	3000	LO TAK	4 AED 65	
		484	Accu	1	25	
		1496	0.55K	LS SAR	28 MAY 67	
1965 0208X		1408	05511	1	ΥAΜ	
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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1965 LAUNCHES (CUNT.)						
- 1		1530	USSR	15 MAR	کا	
- 1		1531	ASST		MAR	
1965 020CD		1532	USSR	15 MAR	11 JAN 66	
		1534	USSR	- 1	- 1	
-		1535	USSR	,	DEC.	
1965 020CG		1536	USSR		APR	
- 1		1538	USSR	15 MAR	3 DEC 74	
L		1539	ASSII	1	SEB	
1965 020CK		1540	USSR		FEB	
- 1		1542	NSSE (I	15 MAR	30 MAR 05	
		1563	45511		SED	
1965 02000		1544	USSR	1	FEB	
		1546	USSR	15 MAR	16 AUG 66	
		1547	USSR	ŧ	Ē	
1965 020CU		1548	USSR		Y	
		1551	USSR	15 HAR	19 DEC 69	
ı		1552	USSR	4	MAR	
1965 020DA		1554	USSR	15 MAR	23 JUL 66	
1965 02008		1555	USSR			
		1557	USSR	ı	FEB	
1965 020DF		1559	8551	15 MAR	18 100 67	
1		1560	USSR		1	
		1561	USSR		APR	
1965 020DK		1563	NSSE INSEE	15 MAR	28 OCT 49	
1		1564	USSR	1	SEP	
		1565	USSR		FEB	
1965 020DP		1567	USSR	15 MAR	12 SEP 74	
ı		1568	ASSE		XAY.	
1965 020DR		1569	USSR	15 MAR		
		1593	USSR	- 1	28 SEP 70	
-		1594	USSR	15 MAR	DEC	
		1595	USSR		APR	
1965 UZODY		1598	HSSB	15 MAR	12 ADR 76	
		1599	USSR	1	JAN	
1965 020EA		1600	USSR			
		1633	BSSI BSSI	15 MAR	IR NAT. IE	
		1635	ASSI			

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DESIGNATION		NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1965 LAUNCHES	ES (CONT.)						
1965 020EF			2203	USSR	15 MAR		
- 1			2204	USSR	- 1	PET	
			2339	USSR	_	>0 0	
1965 020EK			2387	USSR	-		
1965 020EL			2051	3000	LO HAX	19 FEB 67	
			3707	USSR	j	120	
			3964	USSR	15 MAR	29 DCT 80	
			4016	USSR	15 MAR	APR	
- 1			5733	USSR	ŀ	HAR	
1965 020FB			7613 5083	2007 2008	LO MAK	13 FEB 81	
í			6736	USSR	ŧ	1	
			1288	115		DCT	
			1289	SN			
			1290	SII		1 DCT 65	
			1376	Sn		NAU	
1	F		1403	5000		Y	
1965 022A	VUSKAUD 2		12/4	USSK	LB MAK	19 MAK 65	
			1286	USSR		HAR	
			1287	USSR	18 MAR	- 1	
	RANGER 9		1294	SN			* 5
- 1	GEMINI 3		1301	ns.		AAR.	*
1965 0248	COSMUS 64		1302	SO	23 MAR	24 MAK 65 2 APR 65	
1			1306	USSR	1	i	
			1308	USSR			
1965 026A			1307	NS	25 MAR	4-5 APR 65	
	- 1		1311	SII	- 1	APR	
1965 029A	COSMOS 69		1321	ASCO.	17 APK	CO APA CA	
			1322	USSR	17 APR	20 APR 65	
	MOLNIYA 1-1		1324	USSR	- 1		
			1325	USSR	23 APR		
			1326	USSR	- 1	2 101 2	
1965 0300			1961	3000 1000	28 APR	A MAY 65	
1			1329	Sn	ł	31 DCT 69	
			1331	US	28 APR	30 APR 65	
1			1332	SN			
			1333	Su	- 1	APR	
			1334	S n	28 APR	MAY	
- 1			1357	Şn		- 1	
1965 033A			1330	SO SI	29 APR	26 MAT 65	
	COSMUS 66		1362	USSR		MAY	
			1363	USSR	7 MAY	HAY	
			1364	USSR	7 MAY	9 MAY 65	
1965 3350			1365	USSR	YAM /	Y MAI DO	

DECAYED UBJECTS

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY
1965 LAUNCHE	ES (CONT.)				
ן יטיי	LUNA 5	1366	USSR	9 нау	Y A
- 1		1369	USSR		10 MAY
1		1374	Sn	- 1	
		1415	US	18 MAY	2 JUN 65
		1380	SU	- 1	¥.
1965 038F	E GA SHS	1381	Sn	25 MAY	3 AUN 79
1965 0604	COSMOS 67	1382	ASSU	ΈΥ	ł
		1383	USSR	25 MAY	N C
1965 0400		1387	USSR	25 MAY	30-31 MAY 65
		1386	ST	KAY	E
	EXPLORER 28	1388	ŠS	29 HAY	7 HIN 68
- 1		1391	SO	NOF E	Š
1965 (1998		1395	USSR	- 1	29 NOF 01
		1395	115	MILE	NATE OF THE PERSON NAMED IN COLUMN 1
		1414	SS SS	NOT 6	ŠŽ
1965 0408		1405	USSR		٦ آ
1965 0460		1407	USSR	. 1	NOC
- 1		1408	ISSE	» þ	- 1
1965 047A		1413	SA OS	NOT BT	21 JUN 65
		12516	SS		DEC
1965 049A	COSMOS 69	1421	USSR	-	1
- 1		1423	usse	ין י	
1965 049C		1429	USSR	25 JUN	30 JUN 65
		1424	Sn	. !	S C
		1426	- Su	- 1	
1965 0500	COSMOS 70	1631	ASSII	2 JUN 2	18 DEC 66
		1432	USSR	2 JUL	
1965 053A	- 1	1441	USSR		<b>DU</b>
+	COSMOS 72	1442	USSR	[	AUG
	COSMOS 73	1443	USSR	16 JUL	20 MAR 74
1965 053E	1	1445	USSR	_	SEP
1965 0536		1449	USSR	16 JUL	3 HAY 67
ì		1473	USSR	ļ	HAR
1065 353		ار 10	CSSR		12 NUV 6/

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NAME   NUMBER   SQUECE   LANGCH   DECAT	INTER- NATIONAL		CATALOG				
1451   1451   1452   1458   15 JH   16 SEP 65   15 JH   16 SEP 6	DESIGNATION		NUMBER	SOURCE	LAUNCH	OFCAY	NOTES
1451   1458   1451   1458   15 Jul.   15 SEP 65		(CONT					
1450   1450			1451	USSR	1	SEP	
1959   1960   1974   1978   15 Jul   19 Jul			1450	USSR		Ħ	
0.55B         11, 111         5, 11, 111         5, 11, 111         5, 11, 111         5, 111, 111         6, 11, 111			1446	USSR		٦ ٢	
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1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,			1455	Sn	- 1	=	
1956   1956   1957   1958   18 JUL 55   19 JUL 65   1956			1744	S		APR	
USANA         LISSR         18 JILL         21 JILL         65 ALIE           USANA         USANA         19 JIL         18 JILL			1453	USSR	•	₹	
USA   USA	- 1		1456	USSR	- 1	Ħ	
0554         COSMUS 76         1464         USSR         23 JUL         16 JUL         16 JUL         16 JUL         16 JUL         16 JUL         16 JUL         16 JUL         16 JUL         17 JUL <td></td> <td>11</td> <td>1457</td> <td>S</td> <td></td> <td>YCC</td> <td></td>		11	1457	S		YCC	
Deciding   Deciding		S	1464	IISSR	1	MAN	
UODOA         PEGASUS 3         1467         US         30 JUL         2 MUG 69           UODOA         1468         1158         30 JUL         2 MUG 73           UODO         6841         1158         30 JUL         2 MUG 69           UODO         1470         USSR         3 JUL         2 MUG 65           UODO         1470         USSR         3 JUL         1 JUL 65           UODO         1471         USSR         3 JUL         1 JUL 65           UODO         1472         USS         3 JUL 65         1 JUL 65           UODO         1472         USS         3 JUL 65         1 JUL 65           UODO         1472         USS         1 JUL 65         1 JUL 65           UODO         1523         USS         1 JUL 65         1 JUL 65           UODO         1520         USS         1 JUL 65         1 JUL 65 <td></td> <td></td> <td>1465</td> <td>SSS</td> <td></td> <td>ל ע ר</td> <td></td>			1465	SSS		ל ע ר	
1972   1972   1973   1974   1975   1974   1975   1974   1975   1974   1975   1974   1975   1974   1975   1974   1975   1974   1975   1974   1975   1974   1975   1974   1975   1974   1975   1974   1975   1974   1975   1974   1975   1974   1975   1974   1975   1974   1975			1467	US	•	AUG	
Obe 10.         CORMINS 77         66841         US         3 JUL         2 OCT 73           Obe 13.         CORMINS 77         1469         USSR         3 AUG         65           DACAS         1470         USSR         3 AUG         17 JUN 69           DACAS         1472         US         13 AUG         17 JUN 69           DACAS         1509         US         13 AUG         17 AUG         17 AUG           DACAS         1509         US         13 AUG         2 AUG         5 AUG <td>- 1</td> <td></td> <td>1468</td> <td>US</td> <td>- 1</td> <td>NDV</td> <td></td>	- 1		1468	US	- 1	NDV	
0618         1470         USSR         3 AUG         15 AUG         65 AUG			6841	Sn	-	0CT	
MARCH         LIAZI         LIS         3 ALIG         15 ALIG         15 ALIG         16 ALIG         17 ALIG         17 ALIG         17 ALIG         18 ALIG			1470	USSR		9114	
COCED         1472         US         3 AUG         17 JUN 69           COCED         1474         US         3 AUG         13 JUG 65           DOSSH         2335         US         13 AUG         13 AUG         13 AUG           DOSSH         13 AUG         14 AUG         14 AUG         14 AUG         14 AUG         14 AUG         14 AUG         14 AUG         14 AUG         14 AUG         14 AUG         15 AUG         15 AUG         15 AUG         15 AUG         15 AUG         15 AUG         15 AUG         15 AUG         15 AUG         15 AUG         15 AUG         15 AUG         15 AUG         15 AUG         15 AUG         15 AUG         10 AUG         10 AUG         10 AUG         10 AUG         10 AUG         10 AUG         10 AUG         10 AUG         10 AUG         10 AUG         10 AUG         10 AUG			1471	SII		AUG	
MATCH         1914         US         3 AUG         65 AUG			1472	Sn		3	
LOSAN         ASADE         US         13 ANG         13 ANG         13 ANG         13 ANG         13 ANG         12 ANG         10 ANG         10 ANG         10 ANG         12 ANG	1		1974	SII.	- 1	AUG	
0.65R         9.65R         9.65R         13 AUG         9 NDY 80           0.66AS         COSMOS 76         1509         USSR         14 AUG         22 AUG         65           0.66A         LISSR         14 AUG         22 AUG         65         13 AUG         65           0.66A         LISSR         14 AUG         22 AUG         65         14 AUG         65           0.66A         LISSR         14 AUG         22 AUG         65         14 AUG         65           0.66A         LISSR         14 AUG         22 AUG         65         14 AUG         65           0.66A         LISSR         1516         US         21 AUG         22 AUG         65           0.68B         LISSR         LISSR         21 AUG         27 AUG         65         24 AUG         65           0.69B         LISSR         LISSR         25 AUG         25 AUG         65         24 AUG         65 <td< td=""><td>- 1</td><td></td><td>3809</td><td>S S</td><td></td><td>A PR</td><td></td></td<>	- 1		3809	S S		A PR	
Mode         COSMUS 78         1505         USSR         14 AUG         22 AUG         65           DAGAB         LISSR         14 AUG         22 AUG         65         1509         USSR         14 AUG         22 AUG         65           DAGAB         LISSS         1510         USSR         14 AUG         17 AUG         65           DAGAB         LISTA         USSR         21 AUG         22 AUG         65           DAGAB         LISTA         USSR         21 AUG         27 AUG         65           DAGAB         LISTA         USSR         21 AUG         27 AUG         65           DAGAB         LISTA         USSR         25 AUG         25 AUG         65           DAGAB         LISTA         USSR         25 AUG         25 AUG         65           DAGAB         LISTA         USSR         25 AUG         31 AUG         65           DAGAB         LISTA         USSR         25 AUG         31 AUG         65           DAGAB         LISTA         USSR         25 AUG         31 AUG         65           DAGAB         LISTA         USSR         25 AUG         35 AUG         31 AUG           DAGAB <td< td=""><td></td><td></td><td>5363</td><td>Sn</td><td>ı</td><td>Ş</td><td></td></td<>			5363	Sn	ı	Ş	
OLOSA         CUSMUS         18         1505         USSR         14 AUG         22 AUG         65           OLOGA         CUSMUS         1509         USSR         14 AUG         17 AUG         65           OLOGA         LOSATA         1513         USSR         17 AUG         65           OLOGA         CORMINI         1516         US         21 AUG         29 AUG         65           OLOGA         CEMINI         1516         US         21 AUG         29 AUG         65           OLOGA         CEMINI         1516         US         21 AUG         29 AUG         65           OLOGA         COSMUS         1523         USSR         25 AUG         27 AUG         65           OLOGA         COSMUS         1524         USSR         25 AUG         26 AUG         65           OLOGA         LOSMUS         1524         USSR         25 AUG         26         40         65           OLOGA         LOSMUS         1524         USSR         25 AUG         26         40         65           OLOSA         COSMUS         1524         USSR         25 AUG         26         40         65           OLOSA         COS			0529	211	٦	4	
OVEGO         LEGO         USSR         14 AUG         17 AUG         65           OVERA         CEMINI 5         1513         US         21 AUG         29 AUG         65           OVERA         COSMOS         1516         US         21 AUG         29 AUG         65           OVERA         LEGO         1518         US         21 AUG         27 AUG         65           OVERA         LOSMOS         1524         USSR         25 AUG         2 SEP 65         65           OVERA         COSMOS         1524         USSR         25 AUG         2 SEP 65         65           OVERA         COSMOS         1525         USSR         25 AUG         2 SEP 65         65           OVERA         LISSR         LISSR         25 AUG         31 AUG         65           OVATE         LISSR         LISSR         25 AUG         31 AUG         65           OVATE         LISSR         LISSR         25 AUG         31 AUG         65           OVATE         LISAR         USSR         25 AUG         31 AUG         65           OVATE         LISAR         LISAR         25 SEP         11 OCT         65           OVATE <td< td=""><td></td><td></td><td>1505 1507</td><td>USSR USSR</td><td></td><td>AUG SEP</td><td></td></td<>			1505 1507	USSR USSR		AUG SEP	
O68A         CEMINI 5         1513         US         17 Aug         11 Aug         29 Aug         65           O68B         1516         US         21 Aug         24 Aug         65           O68B         1518         US         21 Aug         27 Aug         65           068C         1519         US         21 Aug         27 Aug         65           069C         1523         USSR         25 Aug         2 SEP 65         2           069C         1524         USSR         25 Aug         65         65           069C         1526         USSR         25 Aug         65         65           069C         1526         USSR         25 Aug         65         65           0718         1527         USSR         25 Aug         65         65           0718         1527         USSR         25 Aug         65         67           0718         1527         USSR         25 Aug         65         67           0718         1582         USSR         25 Aug         65         67         66           072         1582         USSR         25 SEP         11 DCT         65			1509	USSR		AUG	
OABC         COSMUS 91         1517         US         21 AUG         24 AUG         65           OABC         1518         USSR         21 AUG         27 AUG         65           OABC         1519         USSR         21 AUG         27 AUG         65           OABA         1523         USSR         25 AUG         2 SEP         65           OABC         1524         USSR         25 AUG         2 SEP         65           OABC         1524         USSR         25 AUG         2 SEP         65           OABC         1525         USSR         25 AUG         2 SEP         65           OABC         1526         USSR         2 SAUG         31 AUG         65           OABC         1526         USSR         2 SAUG         31 AUG         65           OATA         USSR         2 SAUG         31 AUG         65           OATA         USSR         2 SEP         11 OSEP         2 SEP         67           OATA         USSR         1 OSEP         2 SEP         4 OCT         65           OATA         USSR         2 SEP         4 OCT         65           OATA         USSR         2 SEP	ł	1	1514	80	1		1
068C         1518         US         21 AUG         27 AUG           068B         USSR         21 AUG         26 AUG           069A         COSMOS 79         1523         USSR         25 AUG         2 SEP           069B         1524         USSR         25 AUG         2 SAUG         2 SEP           069C         1525         USSR         25 AUG         26 AUG         26 AUG           069E         1527         USSR         25 AUG         31 AUG           071A         USSR         25 AUG         31 AUG           071B         157B         USSR         25 AUG         31 AUG           072U         157B         USSR         25 AUG         31 AUG           072U         1581         USSR         25 AUG         31 AUG           072U         1581         USSR         25 SEP         17 SEP           075A         COSMUS 91         1603         USSR         23 SEP         4 DCT           075C         LOSMUS 91         1604         USSR         23 SEP         4 DCT           075C         LOSMUS 91         1606         USSR         23 SEP         29 SEP           075C         LOSMUS 91         1606 </td <td></td> <td></td> <td>1517</td> <td>s s</td> <td></td> <td>• • • • • • • • • • • • • • • • • • •</td> <td>t</td>			1517	s s		• • • • • • • • • • • • • • • • • • •	t
USSR         25 AUG         26 AUG           0694         COSMOS 79         1523         USSR         25 AUG         2 SEP           0690         1524         USSR         25 AUG         2 AUG         2 AUG           0690         1524         USSR         25 AUG         2 AUG         31 AUG           0690         1527         USSR         25 AUG         31 AUG           0718         1527         USSR         25 AUG         31 AUG           0718         1578         USSR         25 AUG         31 AUG           0724         1578         USSR         25 AUG         31 AUG           0725         1578         USSR         25 AUG         31 AUG           0724         1579         USSR         25 SEP         17 SEP           0725         1602         USSR         22 SEP         11 GCT           075A         1603         USSR         23 SEP         4 DCT           075G         1604         USSR         23 SEP         29 SEP           075G         1609         USSR         23 SEP         29 SEP           075A         1609         USSR         23 SEP         5 GCT			1518	Sn	l .	<b>V</b> OC	
USSR         25 AUG         2 SEP           0698         USSR         25 AUG         2 SEP           069C         1525         USSR         25 AUG         26 AUG           069C         1526         USSR         25 AUG         31 AUG           069E         1527         USSR         25 AUG         31 AUG           071A         157B         USSR         9 SEP         17 SEP           071B         157B         USSR         9 SEP         18 SEP           072C         USSR         9 SEP         18 SEP           072C         USSR         9 SEP         18 SEP           072C         USSR         22 SEP         11 DCT           075A         USSR         23 SEP         1 DCT           075G         USSR         23 SEP         4 DCT           075G         USSR         23 SEP         29 SEP           075G         USSR         23 SEP         29 SEP           075G         USSR         23 SEP         5 DCT           075G         USSR         23 SEP         5 DCT	-	ı	1519	20	- E	- 1	
069C         1525         USSR         25 AUG         26 AUG           069D         1526         USSR         25 AUG         31 AUG           069E         1527         USSR         25 AUG         31 AUG           071A         USSR         25 AUG         31 AUG           071B         USSR         9 SEP         17 SEP           072C         USSR         9 SEP         18 SEP           072C         USSR         9 SEP         11 GEP           075A         USSR         22 SEP         11 GCT           075A         USSR         23 SEP         4 DCT           075G         USSR         23 SEP         4 DCT           075G         USSR         23 SEP         29 SEP           075G         USSR         23 SEP         29 SEP           075G         USSR         23 SEP         5 DCT           075A         USSR         23 SEP         5 DCT			1523	USSR			
USSR         25 AUG         31 AUG           069E         USSR         25 AUG         31 AUG           0714         COSMUS 85         1578         0 SSR         25 AUG         31 AUG           0716         1578         USSR         9 SEP         17 SEP           072 C         USSR         9 SEP         18 SEP           072 C         US         10 SEP         6 APR           075 A         COSMUS 91         1602         USSR         23 SEP         11 DCT           075 C         USSR         23 SEP         4 DCT         4 DCT           075 C         USSR         23 SEP         4 DCT           075 C         USSR         23 SEP         29 SEP           075 C         USSR         23 SEP         29 SEP           075 C         USSR         23 SEP         5 DCT           075 C         USSR         23 SEP         5 DCT			1525	USSR	1	AUG	
USSR         COSMUS 85         1527         USSR         25 AUG         31 AUG           0714         COSMUS 85         1578         USSR         9 SEP         17 SEP           0718         1579         USSR         9 SEP         18 SEP           0724         US         16 SEP         25 EB           0725         US         16 SEP         25 EB           0754         USSR         22 SEP         11 DCT           0756         USSR         23 SEP         4 DCT           0757         USSR         23 SEP         4 DCT           0756         USSR         23 SEP         29 SEP           0756         USSR         23 SEP         50CT			1526	USSR	- 1		
071b         USSR         9 SEP         18 SEP           072d         US         10 SEP         25 FEB           072c         US         10 SEP         25 FEB           072c         US         10 SEP         25 FEB           075d         USSR         22 SEP         11 DGT           075d         USSR         23 SEP         4 DGT           075c         USSR         23 SEP         4 DGT           075c         USSR         23 SEP         29 SEP           075c         USSR         23 SEP         5 GCT			1521	X 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		AUG	
072b         US         10 SEP         25 FEB           072C         US         10 SEP         6 APR           072b         1602         US         22 SEP         11 DCT           075A         C0SMUS 91         1603         USSR         23 SEP         4 DCT           075C         USSR         23 SEP         4 DCT           075C         USSR         23 SEP         29 SEP           075E         1607         USSR         23 SEP         29 SEP           075E         1607         USSR         23 SEP         29 SEP           075A         USSR         23 SEP         29 SEP           075A         USSR         23 SEP         29 SEP           075A         USSR         23 SEP         5 GCT		ı	1579	USSR		SEP	
072C         US         10 SEP         6 APR           .024A         .025A         .02 SEP         .03 SEP         .04 SEP			1581	SII		FEB	
075A     COSHUS 91     1603     USSR     23 SEP     1 OCT       0.75B     1604     USSR     23 SEP     4 DCT       0.75C     1605     USSR     23 SEP     29 SEP       0.75D     1607     USSR     23 SEP     29 SEP       0.75E     1607     USSR     23 SEP     29 SEP       0.75A     1609     USSR     23 SEP     5 GCT			1582	Sn			
0.75B     1604     1504     4 DCI       0.75C     1605     USSR     23 SEP     29 SEP       0.75D     1606     USSR     23 SEP     29 SEP       0.75E     1607     USSR     23 SEP     29 SEP       0.75A     1609     US     23 SEP     5 GCT		1	1603	11558		1	
075C     1605     USSR     23 SEP     29 SEP       0.750     1506     USSR     23 SEP     29 SEP       075E     1607     USSR     23 SEP     29 SEP       0.75A     1609     US     30 SEP     5 DCT		- 1	1604	USSR	- 1	ł	
075E 23 SEP 27 SEP 29 SEP 29 SEP 29 SEP 29 SEP 29 SEP 29 SEP 27 SEP 29 SEP 20 SEP 5 GCT			1605	USSR		SEP	
0.35K 2.35F 2.75F 0.76A US 30 SEP 5 OCT			1607	ACCU	ł	1	
			1609	 US		pcr	

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	1 MAR 02		100	1710		08288	1965
		-	SS	1700		08280	ĺ
	-1	15 007	Sn	1699		OBZBN	1
	HAY	-	SU	1698		0828M	
	1	۲ì		1697		00201	1965
	18 JAN 68	15 001	SI	1696		082BK	1965
	0 KF		05	7607		0020	
	*	- 1	500	1691		36680	
	NO		SUS	1690		08280	1965
	1	1		1689		C828C	1905
	YAI		US	1688		06288	1965
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1		1683		WAZ80	
		15 061	110	1679		082AS	
	<b>≥</b> ₹			1010		CBAR	1965
J		- 1	50	1676		OBZAN	1965
L.H.	<b>A</b> UG	-	CN	1669		OR2AC	1965
17	**************************************		SA	1667		00245	700
Al	CN		SO	1666		082AD	
ነፖ	*	1	5A	1665		082AC	1965
<b>.</b>	15 MAY 71	15 001	S	1661		082 <b>Y</b>	
<u> </u>		12 001	63			\$200×	
١.٠		- 1	116	1659		082M	
ور	Č	15 OCT	S	1658		7580 7580	1965
وال	25 NOV 81	15 001	30	1656		1821	200
•	APR	15 OCT	S	1655		0825	1965
	E	1	ST	1654		0628	1965
	Y A R		ยย	1652		92B0	1965
			SII	1650		032M	1965
	16 OCT 79	- 1	SU	1649		082L	1965
		15 001	118	1668		CBAK	1965
			118	1645		0826	1965
	A			1644	i	3280	1965
	E			1680			1965
	SEP		Ş	7571	TITAN 3 C=4		1965
	MAN		NO C	1620	- 1		1965
	VOV	_	USSR	1623		0805	1965
	1	13.007	BSSII	1622		UBUL	200
	VOV		USSR	1619		0838	1965
	M A C		ASSII	1621	MOLNIYA 1-2		1965
	29 007 65	2 001	SU	1615		079A	1965
		* OCT	I S S R	1612		0770	1965
<b>*</b>	B	9 OC I	NSSEL	1611		0774	1965
	3 OCT 65	30 SEP	Sn	1614	7	076B	1965
					(CONT.)	LAUNCHES	1965
NOTES	υξCAY	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION	DESI
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				OCCASED DOUGLES		j	111

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1965 LAUNCHES (CL	(CUNT.)					
1		1712	SO	15 OCT	16 SEP 81	
1965 08280 1965 0828V		1714	Sn	15 0CT	L	
- 1		1717	SA			
1965 68282		1718	SD SD	15 001	ì	
_		1720	Sn		4 MAR 67	
1965 0826E		1726	SIT	15 OCT	ł.	
1		1706	50	- 1	**	
		1747	Sn	15 OCT	AUG	
- 1		1749	sn	1	9-0EC 19	
1965 082CM		1750	SU SII	15 UC1	- 1	
		1752	Sn	15 OCT	_	
		1754	Sn.	1	30 406 68	
1965 082CS		1755	20 311	15 UC.	X X	
i .		1758	Sn	15 OCT		
		1759	311	15 001	31 440 71	
1965 C82CA		1700	\$ D	,	- 1	
		1763	Sn:	15 OCT		
		1764	38	15 001	- 24 VIII. 0	
1965 U82DC		1765	50	- 1	ı	
		1767	Sn:	15 OCT		
1965 0820F		1769	511	15 OCT	7 NOV 81	
- 1		1770	SM	15 061	- 1	
		1819	US			
1965 0820L		1821	Sn	15 OCT		
- 1		1823	3n	t	1	
		1824	SO	15 UCT	11 JUL 6/	
1965 0820S		1827	SN			
1965 C820I		1828	30			
		1831	SO	15 UC#	10 NUV 67	
1965 082EC		1837	Sn			
		1862	Sn	120 61	9 d 3 S	
	!	1848	US	15 OCT 15 OCT	17 SEP 69	
1965 JUSEH		1852	Sn			
1		1981		100 31	22 ADD 70	
		1850	\$ D		9 XUX	
1965 082EL		1854	s o	15 OCT		

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NUMBER   N	INTER-						
AUNCHES (CONT.)   1956   195	DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	5	NOT
ORDER   ORDE	S (C	•					
Name	0		1856	us	8	FEB	
Name	- 1		1860	SO CO	- 1	APR	
MAZEK         1882         US         15 Oct         14 July           MAZEK         1883         US         15 Oct         14 July           MAZEK         1886         US         15 Oct         24 July           MAZEK         1886         US         15 Oct         24 July           MAZEK         1887         US         15 Oct         24 July           MAZEK         1889         US         15 Oct         24 July           MAZEK         1889         US         15 Oct         11 July           MAZEK         1889         US         15 Oct         14 July           MAZEK         1889         US         15 Oct         14 July           MAZEK         1889         US         15 Oct         14 July           MAZEK         1899         US         15 Oct         14 July           MAZEK         1890         US         15 Oct         14 July           MAZEK         1890<			1880	SO SO	2	SEP	
ORAZPE         1880         US         15 OCT         24 MAY           ORAZPE         1880         US         15 OCT         24 MAY           ORAZPE         1880         US         15 OCT         24 MAY           ORAZPE         1880         US         15 OCT         24 MAY           ORAZPE         1890         US         15 OCT         24 MAY           ORAZPE         1895         US         15 OCT         24 MAY           ORAZPE         1896         US         15 OCT         24 MAY           ORAZPE         1897	1		1885	S S	2	کے وا	
Decirity   Decirity	- 1		1886	Sn Sn		3	
Health   H			1889	S\$			
CHAZES   1892   15 CT   14 AM	- 1		1890	8.0	1	*	
CASEFI   C	1		1891	SO		MAR	
UBZEK         1895         US         15 OCT         8 SEP           UBZEK         1895         US         15 OCT         28 SEP           UBZEK         1897         US         15 OCT         27 SEP           UBZEK         1900         US         15 OCT         17 FEB           UBZEK         1900         US         15 OCT         27 HAR           UBZEK         1900         US         15 OCT         21 HAR           UBZEK         1900         US         15 OCT         21 HAR           UBZEK         1911         US         15 OCT         21 HAR           UBZEK         1916         US         15 OCT         21 JUN           UBZEK         1917         US         15 OCT         21 JUN           UBZEK         1917         US         15 OCT         21 JUN           UBZEK         1917         US         15 OCT         21 JUN           UBZEK         1918 <td< td=""><td></td><td></td><td>1893</td><td>SS</td><td></td><td>NO.</td><td></td></td<>			1893	SS		NO.	
CHEZEN         1896         25 CH           CHEZEN         1897         05 15 GCT         7 FEB           CHEZEN         1900         US         15 GCT         14 MUN           CHEZEN         1900         US         15 GCT         14 MUN           OBZEN         1900         US         15 GCT         23 MAR           OBZEN         1900         US         15 GCT         23 MAR           OBZEN         1911         US         15 GCT         24 MAR           OBZEN         1911         US         15 GCT         24 MAR           OBZEN         1911         US         15 GCT         24 MAR           OBZEN         1911         US         15 GCT         24 MAR           OBZEN         1913         US         15 GCT         24 MAR           OBZEN         1913         US         15 GCT         24 MAR           OBZEN         1913         US         15 GCT         24 MAR           OBZEN         1920         US         15 GCT         24 MAR           OBZEN         1923         US         15 GCT         21 JUN           OBZEN         1923         US         15 GCT         21 JUN			1895	Sn		SEP	
082FR         1909         US         15 0CT         14 MOV           082FR         1909         US         15 0CT         14 MOV           082FF         1909         US         15 0CT         24 MAR           082FF         1919         US         15 0CT         24 MAR           082FF         1911         US         15 0CT         24 MAR           082FF         1911         US         15 0CT         24 MAR           082FF         1911         US         15 0CT         24 MAR           082FF         1913         US         15 0CT         24 MAR           082FF         1916         US         15 0CT         25 SEP           082FF         1916         US         15 0CT         27 MAR           082FF         1917         US         15 0CT         27 MAR           082FF         1917         US         15 0CT         27 MAR           082FF         1927         US         15 0CT         27 MAR           082FF         1927         US         15 0CT         27 MAR           082FF         1927         US         15 0CT         27 MAR           082FF         192FF         <			1897	ÙS		FEB	
OBJETS         1900         US         15 OCT         23 MAR           OBJETS         1909         US         15 OCT         19 MAR           OBJETS         1911         US         15 OCT         21 MAR           OBJETS         1911         US         15 OCT         21 MAR           OBJETS         1911         US         15 OCT         21 MAR           OBJETS         1911         US         15 OCT         21 MAR           OBJETS         1911         US         15 OCT         21 MAR           OBJETS         1913         US         15 OCT         21 MAR           OBJETS         1914         US         15 OCT         21 MAR           OBJETS         1916         US         15 OCT         21 MAR           OBJETS         1917         US         15 OCT         21 MAR           OBJETS         1918	- 1		1900	SO		24	
OBSEFY         1910         US         15 0CT         21 AW           OBZFY         1911         US         15 0CT         21 AW           OBZFY         1913         US         15 0CT         22 SEP           OBZFY         1914         US         15 0CT         26 SEP           OBZFY         1913         US         15 0CT         26 SEP           OBZFY         1914         US         15 0CT         1 9EC           OBZFY         1913         US         15 0CT         1 9EC           OBZFY         1914         US         15 0CT         1 PEC           OBZFY         1918         US         15 0CT         1 PEC           OBZFY         1918         US         15 0CT         1 PEC           OBZFY         1920         US         15 0CT         2 PEC           OBZFY         1921         US         15 0CT         2 PEC           OBZFY         1922         US         15 0CT         2 PEC           OBZFY         1923         US         15 0CT         2 PEC           OBZFY         1925         US         15 0CT         21 JW           OBZFY         1925         US	- 1		1900	S S S		<u>ا</u> ا	
D82FX         1912         US         15 OCT         26 SEP           D82FY         1914         US         15 OCT         26 SEP           D82FY         1916         US         15 OCT         26 SEP           D82GA         1916         US         15 OCT         1 FEB           D82GC         1917         US         15 OCT         1 FEB           D82GC         1918         US         15 OCT         2 PC           D82GC         1917         US         15 OCT         2 PC           D82GC         1920         US         15 OCT         2 PC           D82GC         1921         US         15 OCT         2 PC           D82GC         1922         US         15 OCT         2 PC           D82GC         1923         US         15 OCT         2 PC           D82GC         1930         US         15 OCT         2 PC           D82GC         19 OCT         12 PC			1911	S.n.		S T	•
08267   08266     1916     US     15 0CT     1 FEB       08266     1917     US     15 0CT     1 APR       08266     1918     US     15 0CT     10 NOV       08266     1920     US     15 0CT     24 FEB       08267     1921     US     15 0CT     24 FEB       08267     1922     US     15 0CT     24 FEB       08268     1922     US     15 0CT     24 FEB       08269     1923     US     15 0CT     21 JUN       08269     1926     US     15 0CT     27 FEB       08269     1927     US     15 0CT     27 FEB       08269     1930     US     15 0CT     27 FEB       08260     1930     US     15 0CT     27 FEB       08261     12 FEB     1905     US     15 0CT     27 FEB       08260     1930     US     15 0CT			1913	SO		SEP	•
00260         1918         US         15 0cT         10 NOV           00260         1918         US         15 0cT         2 0tC           00260         1920         US         15 0cT         8 FEB           00260         1921         US         15 0cT         24 FEB           00260         1921         US         15 0cT         24 FEB           00260         1921         US         15 0cT         24 FEB           00260         1923         US         15 0cT         25 UN           00260         1923         US         15 0cT         21 JUN           00260         1926         US         15 0cT         21 JUN           00260         1927         US         15 0cT         21 JUN           00260         1927         US         15 0cT         21 JUN           00260         1927         US         15 0cT         28 FEB           00260         1927         US         15 0cT         28 FEB           00261         1927         US         15 0cT         28 FEB           00261         1928         US         15 0cT         28 FEB           00261         12 AUG <th< td=""><td>- 1</td><td></td><td>1916</td><td>US CO</td><td>- 1</td><td>FEB</td><td>•</td></th<>	- 1		1916	US CO	- 1	FEB	•
08266     1920       08266     1921       08266     1921       08266     1922       08264     1923       08264     1923       08264     1924       08264     1925       08266     1926       08267     15 0cT       1926     05       08268     1926       08269     1927       08260     1928       08260     1923       08260     1930       08260     1930       08260     1930       08260     1930       08260     1930       08260     1930       08260     1930       08260     1930       08260     1930       083     15 0cT       1940     05       083     15 0cT       1940     05       1950     05       1950     05       1950     05       1950     05       1950     05       1950     05       1950     05       1950     05       1950     05       1950     05       1950     05       1950     05	- 1	14 - 15 - 15 - 15 - 15 - 15 - 15 - 15 -	1918	US CO	- 4	No.	,
1926   1921   192   15 86T   24 FEB   1926   1922   15 86T   15 100T   15 100T   15 100T   15 100T   15 100T   15 100T   15 100T   15 100T   15 100T   15 100T   15 100T   15 100T   15 100T   17			1920	S.n		FEB	•
1925   15 00T   17 10N   1826    1923   1826    1924   1826    1826	- 1		1922	SO	- 1	MA C	'
1926   1926   15 067   17 067   18 067   19 06	- 1		1923	Sn	- 1		•
082GL     1926       082GN     1926       082GN     1927       082GN     1928       082GN     1928       082GN     1928       082GN     1928       082GN     1930       082GN     1930       082GN     1957       082GN     15 OCT       1950     08       082GN     15 OCT       1950     08       15 OCT     23 MAR       1965     08       15 OCT     20 MAR       1960     08       15 OCT     20 MAR       1965     08       15 OCT     20 MAR       1	- 1		1925	Sn	- 1	#	-
0826N     1928     US     15 OCT     28 FEB       0826P     1930     US     15 OCT     11 APR       0826Q     1930     US     15 OCT     12 SEP       0826R     1957     US     15 OCT     2 FEB       0826F     1950     US     15 OCT     23 MAY       0826F     1960     US     15 OCT     23 MAY       0827HA     1965     US     15 OCT     6 MAR       0827HA     1965     US     15 OCT     6 MAR			1926	50	1	3 3	
06260 1929 US 15 OCT 12 SEP 06260 1930 US 15 OCT 2 FAVG 06260 1957 US 15 OCT 2 FAVG 06261 1958 US 15 OCT 2 HAY 06261 1958 US 15 OCT 23 HAY 06264 1966 US 15 OCT 23 HAY 06274 1966 US 15 OCT 24 HAY 06274 1965 US 15 OCT 6 HAY			1928	: S: S		FEB	
0026R     1956     US     15 0CT     12 AUG       0026S     1957     US     15 0CT     2 FEB       0026T     1950     US     15 0CT     23 MAY       0026V     1960     US     15 0CT     23 MAR       0021K     1965     US     15 0CT     6 MAR	- 1		1930	Sn	- 1	SEP	
08265     15 OCT     2 HAY       08267     15 OCT     23 HAY       0826V     15 OCT     23 HAY       082HA     1965     US     15 OCT     6 HAR       082HA     1965     US     15 OCT     6 HAR			1956	#S	4	\$	
US 15 OCT 23 MAR US284 1965 US 15 OCT 23 MAR US284 1965 US 15 OCT 6 MAR	1		1957	SO	Į.	FE8	
082HA 1965 US 15 OCT 6 MAR			1960	S C C	-	I A	
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INIEK- Mational		CATALOC				
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1965 LAUNCHES (CONT	•					
ĺ		1971	Sn	15 OCT	22 SEP 70	
1965 082HF		1973	ns	15 OCT	5 MAY 81	
- 1		1974		- 1	- 1	
1965 082HH		1975	Sn			
l .		1977	Sn	I	3	
1965 082HM		1979	Sn	15 001	7 OCT 67	
ł		1980	<u> </u>		*	
_		1984	Sñ:		MAR	
1965 UB2HS		1986	US	15 001	8 JAN 80	
- 1		1987	36	15 901	69 655	
1965 082HU		1988	S	15 OCT	_	
		1990	Sn	l l	9 JAN 69	
Ţ		1991	\$1	- 1	45.0	
1965 082HY		1992	Sn :	15 OCT		
		1999	Sn	ł	ı	
		2041	30	- 1		
1965 682JC		2042	SD I	15 OCT	21 NOV 79	
		2044	Sn		ł	
1965 0824F		2045	30	15 001	20 001 62	
1902 00236 1046 00234		2040	93		NON	
		2048	SN	1	NAL	
1		2049	30	1	¥ (	
1965 U82JM		2051	S0 31	15 UC) 15 OCT	10 SEP 81	
		2053	Sn	15 001	FEB	
1965 08240		2054	300		3	
1702 0023K 1945 0621T		2023	Si	15 001	23 SEP 66	
		2081	S		Ņ	
ı		2082	30	150 65	•	
1965 U82JA 1966 A83JY		2100	0.3	15 OCT	12 DEC 48	
_		2101	Sn		DEC	
- 1		2102	\$n	150 St		
1965 032KB		2103	US	15 UCI	27 OCT 64	
		2333	SS			
1		2340	\$ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ł		
1965 382KF		2384	0.5	15 UC1	29 SEP (3	
		2493	) o	15 OCT		
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FIRML   CATALOG     IGHATION   NAME   NUMBER     IGHATION   NAME   NUMBE			15 86		9400		0000	
LIMMER   LAUNCHES (CONTI.)		1 MAY		S	3405		COZNT	
		***	1	85	3404		JOZINE	
		NOV		SO	3403		OBZND	
		֡֝֟֝֟֝֟֝֟֝֟֝֟֟֝֟֟	- 1	05	2046	į	OCCIO	
		MAR			3401		STATE STATE	1
		I A		: 0	3400		082NB	
		<b>≥</b>			3600		C62NA	
		9	1		י אל הל אין הל		082MX	
		7		100	3384		CBZMM	1965
					3382		082MU	1965
Fights   Court   Fights   Court   Fights   Court   Fights   Figh		2		16	3379		082MR	- 1
Fight   Court   Fight   Court   Fight   Fight   Fight   Figh   Fight		100		LIS.	3378		CH2HQ	
Imamy   Catalog		2	1		7577		- INZ B O	- 1
Fight   Catalog   Catalo		¥ 3		US	3376		062MN	
Fight   Catalog   Catalo		8	1	50	3374		MAZDO	- 1
FIRMAL   CATALOG   CONT.)   CATALOG   CONT.)   CATALOG   CONT.)   CATALOG   CONT.)   CATALOG   CONT.)   CATALOG   CONT.)   CATALOG   CONT.)   CATALOG   CONT.)   CATALOG   CONT.)   CATALOG   CONT.   CATALOG   CONT.   CATALOG   CONT.   CATALOG   CONT.   CATALOG   CONT.   CATALOG   CONT.   CATALOG   CONT.   CATALOG   CONT.   CATALOG   CONT.   CATALOG   CONT.   CATALOG   CONT.   CATALOG   CONT.   CATALOG   CONT.   CATALOG   CONT.   CATALOG   CATALOG   CONT.   CATALOG   CONT.   CATALOG   CONT.   CATALOG		NOV		S	3372		COLMA	
FIRMAL   CATALOG   COUNT.     CATALOG   COUNT.     CATALOG   COUNT.     CATALOG   COUNT.     CATALOG   COUNT.     CATALOG   CATALOG   COUNT.     CATALOG		*	1		3371			
DEPAIR   CATALOG   DECATALOG	II .		SO	3370		002777		
CHANCHES (COINT.)   CATALOG   COUNCIES (COINT.)   CATALOG   COUNCIES (COINT.)   CATALOG   COUNCIES (COINT.)   CATALOG   COUNCIES (COINT.)   CATALOG   COUNCIES (COINT.)   CATALOG   COUNCIES (COINT.)   CATALOG   COUNCIES (COINT.)   CATALOG   COUNCIES (COINT.)   CATALOG   COUNCIES (COINT.)   CATALOG   COUNCIES (COINT.)   COUN				69	9368		MZEO	1
DEPAIR   CATALOG   CATAL		<u>.</u>		SO	3367		CQ 7.11	
STANKE   CATALOG   CATALOG   CATALOG   CATALOG   CONT.)   STANCE   CANCH   DECAN   CONT.)   STANCE   CANCH   DECAN   CONT.)   STANCE   C		<b>1</b>	ŧ	50	3366		00200	
CHANCHES (CONT.)   CATALOG   CATALOG   CONT.   CATALOG   CATALOG   CONT.   CATALOG   CATALOg   CATALOG		I A R		SO	3365		OGZAC	!
STANK   CATALOG   CATALOG   CATALOG   CATALOG   COUNT.)		#	1	SA	3364		00210	
CONATION NAME CATALOG   CONT.   CONT		<b>APR</b>		S	3363		COCTIM	
CHANCHES (CONT.)   CATALOG   CATAL		#	1	- 60	2000		0001	
CHARLOG   CATALOG   CATA		S		: 0	3363			
CATALOG   CATA		4		80	3368		0821 X	J) (
CHANTION NAME   CATALOG   COUNCE   CO		IAR.		SO	1150		0025	
CATALOG   CATALOg   CATALOG   CATA		#	1	SB	1000			
CATALOG   CATA		I AR		CS	3323			Ĭ
CHNAL   CATALOG   CONT.   CATALOG   CHNALION   NAME   NUMBER   SOURCE   LAUNCH   DECAN   CONT.   CON		ł.	- 1	- 85	2226		08210	65
CATALOG   CATA		DEC	2	5	3004		6821.5	\$
CATALOG   CATA		4	#		30.64		082LM	965
CATALOG   CATA		JAN			3050		08211	\$
CATALOG   CATA		***	- 1	110	3049		082LK	965
CATALOG   CATA		1		3	3060		082111	3
CATALOG   CATALOG   CATALOG   CATALOG   CATALOG   CONT.)   NAME   NUMBER   SOURCE   LAUNCH   DĘCAN   DOZKA		*	1		6 to 0 to		082LG	965
CATALOG   GNATION   NAME   NUMBER   SOURCE   LAUNCH   DĘCAN   DEC   DE		יו מ		46	2992		17280	
CATALOG   CATA			- 1		2991		082LE	
GHATION NAME   CATALOG   GHATION   NAME   NUMBER   SOURCE   LAUNCH   DECA		)		116	2929		06210	\$
CATALOG   CATA					2899		082LA	965
CATALOG   CATA		) >		46	2898		2×280	9
NAME NUMBER SOURCE LAUNCH DECAY ES (CONT.)  2574  2574  2578  2787  US  15 OCT 12 FEB 2791  US 15 OCT 13 AUG 2792  US 15 OCT 29 APR 2793  US 15 OCT 29 APR 2794  US 15 OCT 29 APR 2795  US 15 OCT 29 APR 2796  US 15 OCT 3 FEB			- 1		2887		082KY	965
CATALOG  NAME  NUMBER  SOURCE  LAUNCH  DECA  2574  US  15 OCT  2790  US  15 OCT  12 FEB  2791  US  15 OCT  29 APR  2794  US  15 OCT  29 APR  2794  US  15 OCT  29 APR		ה ה ה		45	2005		06244	1365
CATALOG  NAME  NUMBER  SOURCE  LAUNCH  DECA  2574  2574  US  15 OCT  12 FEB  2787  US  15 OCT  13 AUG  2787  US  15 OCT  13 AUG  2787  US  15 OCT  13 AUG  2787  US  15 OCT  29 APR			1	100	2794		082KV	965
NAME NUMBER SOURCE LAUNCH DECAY ES (CONT.)  2574 2787 US 15 OCT 12 FEB 2780 US 15 OCT 19 SEP 2790 US 15 OCT 19 AUG 2790 US 15 OCT 19 AUG		APR	-		2702		062KU	965
NAME NUMBER SOURCE LAUNCH DECAY ES (CONT.)  2574 US 15 OCT 12 FEB 2786 US 15 OCT 19 SEP	•	*	- 1	000	2791		CA2KI	965
NAME NUMBER SOURCE LAUNCH DECAY ES (CONT.)  2574  2576  2776  15 OCT 12 FEB		SEP			2707		C82K5	\$
NAME CATALOG  ES (CONT.)  2574  SOURCE LAUNCH DECAY	•	+	- 1	9	2787		CB2KP	965
NAME NUMBER SOURCE LAUNCH D		DEC		: 5	41.02		002 <b>X</b> 2	\$
NAME CATALOG SOURCE LAUNCH D	'		- 1		25.74		0/32KL	965
NAME CATALOG SOURCE LAUNCH D							LAUNCHES (	965
		DĘCAY	LAUNCH	SOURCE	NUMBER	NAME	GNATION	ESI
					CATALOG		ONAL	#

NATIONAL DESIGNATION	NAME	CATALBG NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1965 LAUNCHES (CONT	71.0					
OB 2 MM		3407	US	15 OCT	17 APR 78	
- I		34.10		ł	4	
_		3411	SO	15 OCT	6 UCT 80	
1965 082NL 1965 082NM		3413	Sn	15 OCT	MAR	
		3420	50 50		13 AN 69	
		3421	60	130 51	- 1	
1965 082NA		3423	Sn	15 OCT	3	
- 1		3424	Sn		404	
		3425	Sn	13 AUG	17 UCI 81	
		34.2	SU	15 OCT	MAY	
		24.23	Sn.		4	
1965 082NX		3434	Sn		13 APR 82	
- 1		3435	\$11 \$11	15 001	MAR	
		3430	50	150 51	- 1	
1965 082PA		3438	Sn	15 OCT	00.1	
ı		3439	Sn	1	¥ :	
		3440	Sn	15 UCT	13 APK 81	
1965 082PF		3443	Sn	15 OCT	APR	
- 1		3444	Sn		*	
		<u>ህ</u> ቀቀ5	SO.	15 OCT	25 JUL 80	
		7445	511			
		3448		15 061	NAD	
1965 082PN		3453	S	15 OCT	29 APR 69	
t		3455	57	15 OCT	FEB	
		2463	30	- 1	*	
1965 382PV		3464	Sn:	15 OCT	21 OCT 81	
- (		3465	SII	15 OCT		
1965 082P2		34.75	Sn	ł	- 1	
1965 08208		3476	Sn	15 OCT	19 APR 72	
- 1		3477	311	15 DCT	4 MAR 80	
_		3478	Sil	1	MAR	
1965 0820E		3481	Sn		10 FEB 80	
- 1		3482	<u>Sn</u>	130 61	Į ,	
		3483	Sn	15 00.1	29 MAT 78	
1965 0824K		3490	Sn		NAC	
1902 0624L		3491	Sn	1	3	
_		3493	Sn:	15 OCT	21 JAN 69	
•		3495	50	15 OCT		
		3606	<u></u>			

NATIONAL		CATALOG			
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	ОЕСЛУ
1965 LAUNCHES (CONT.	)				
		3499	Sn	15 OCT	22 MAY 80
- 1		3501 3501	SO	15 OCT	£
1965 082RA		3502	3	- 1	**
- 1		3720	45	13 061	20 MAK /1
l		3721	SS	-	27 JUL 72
1965 082RE		3723	SO	15 OCT	15 MAY 70
1965 082RF		3724		- 1	8
1		3720	63	13 051	69 ANN 11
1		3727	SS	-	22 JUN 69
		3729	Su	15 OCT	26 JUN 69
1965 082RN		3730	<del></del>	8	#
		3737	50	t	AUG
		3733	Š	15 001	5 SEP 79
		3735	S	15 OCT	23 SEP 69
1965 08281		3736			\$
- 1		3636	- Su	35 867	4
1965 002RT		3994	SO	;	23 FEB 77
l		3926	SS		
		3930	SO	15 OCT	19 NOV 82
1965 082SF		3980	Sn	15 OCT	
- 1		3981	<b>85</b>		† ?
1965 08250		3996	SO	15 OCT	i
1		3996	SS		6 FEB 71
1965 0825H		\$00¢	Sn	15 OCT	
		¥017	<del>-</del>	# :	\$
1965 00239		4020	OS	15 OCT	NOF
		4025	SS	15 OCT	16 007 69
1965 06255		26.52	80	#	#
1965 08250		4033	US	15 OCT	SEP
		5056	S	15 001	3 MAY 71
1965 UB2SX		5057	95	- 1	*
		5085	US 0	15 06.	7 MAK 81
		6717	= 7		) !

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1965 LAUNCHES	S (CONT.)					
1965 0B2TC		5345	SN	15 OCT	25 JUN 80	
- 1		5372	37	-	\$	
		5375	S 2 =	15 OCT	A PR	
1965 0821H		5567	Sn	)	21 NOV 72	
ł		5568		- 1	X	
		5569	S	15 OCT	NAD	
1965 0821L		5573	311	15 001	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
		5211	50	15 001	- 1	
1965 082TP		5719	S D		<b>.</b> ∃	
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		5811	יי בי כ	15 001	18 JUL 79	
1965 0821V		5845	Sn	ı	SEP	
ŧ		5856	30	- 1	130	
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1965 3821X		6965	30			
		5968	81	15 OCT	11 MAY 77	
1965 08218		5982	Sn		UAN 7	
- 1		6041	8n		- 1	
		6042	Sn:	15 OCT	AUG 7	
1		6141	30	1	1	
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1965 082UJ		9840	SO		HAY	
	CDSM05 92	1626	USSR	190 9T	3	
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1	1	14.20	95511	19 OCT	NA	
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1		1631	USSR			
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		2098	USSR	130 00	6 JUL 68	
1965 085A		1638	USSR	28 OCT	3 NOV 65	
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i		1639	SD			
- F	PROTON 2	1701	USSR			
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1965 0870		1704	USSR	2 NOV	NO.	
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L	25 MAR 67		FRANCE	1938		20000	0960
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	4	,	80	1720			
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NOTES	DECAY	LAUNCH	SOURCE	NUMBER	NAME	NO	DESIGNATION
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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1965 LAUNCHES	IES (CONT.)					
		1934	FRANCE	6 DEC	10 DEC 81	
1965 1010		1816	SN		DEC	
- 1		1838	Sn	9 050	15 0EC 65-	
_	COSMŲS 99	1817	USSK	10 DEC		
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- 1		1842	SU	1	SEP	
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		1847	USSR	21 DEC	16 APR 66	
	طد	1870	Sn	21 DEC	AUG	
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1965 108U	LES 3	1941	Sn:	21 DEC	6 APR 68	
- 1		3999	311	21 OFC	AON	
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		5434	30	21 050	12 APR 76	
_		5980	\$ 50	24 950	\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	
1965 110B		1901	Sn		6 JAN 66	
1	CUSMOS 102	1867	USSR		NOT	*d
1965 1128		101	USSR		4	
		1872	USSR	28 DEC	27 DEC 67	
1965 112E		1874	USSR		MAY	
1965 1126		1875	USSR	28 DEC	12 468 68	
		1876	USSK 11550	ı	8	
1965 112K		1878	USSR	28 DEC	2 JUL 70	
1965 112K		1907	USSR		20	
- t		1933	ASSII	28 DEC	APR	
1965 112P		0641				
1966 LAUNCHES	HES				- 1	;
1966 000A		2428	Sn	UNKN	18 SEP 77	* *
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- 1		2633	301	Z IAN	15 JAN 66	1
	CUSMUS 104	1903	USSR	- 1	*	
1966 001C		1905	USSR	7 JAN	12 JAN 66 25 JAN 66	
1966 002A		1940	SN	-	AN	
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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY
1966 LAUNCHE	ES (CUNT.)				
		1946	USSR	22 JAN	FEB
1	COSMOS 106	1949	USSR		<₹
		1950 4587	USSR	25 JAN 28 JAN	다
1966 006A	LUNA 9	1954	USSR	NAC 62	FEB
- 1		1955	USSR	1	# c
1		1966	USSR	31 JAN	JAN
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ì		2003	US		\$ :
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		2012	SN	15 FEB	- 1
1966 012C		2015	SO	1	
		2025 2026	SO		17 FEB 66
		2021 2028	Sn		F 6
1966 012J		2029	Sn	15 FEB	
- 1		2031	80	1	4
1966 012L		2032	Sn	15 FEB	FEB
!		2034	SS	15 FEB	19 FEB 66
		2036	SS		
		2038	SO	15 FEB	20 FEB 66
1966 312U		2040	Sn		- 1
- 1		2056	8		
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1966 012X		2059 2059	911	- 1	
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1966 012AC		2062 2063	118	15 FEB	
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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1966 LAUNCHES (CONT.)						
		2067	Sn	15 FEB	17 FEB 66	
1966 0124H		2069	US	15 FEB	20 FEB 66	
- 1		2072	sn		- 1	
		2073	Sn	15 FEB	17 FEB 66	
1966 C12AN		2075	Sn	15 FEB	_	
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1966 C12AR		2018	FRANCE	١.		
- I		2020	FRANCE		SEP	
		2021	FRANCE	17 FEB		
		2993	FRANCE		Ž	
1966 6133		5970	FRANCE	17 558		
1966 013L		5959	FRANCE		21 NOV 78	
1966 013M		6784	FRANCE	ı	X X	
O14A COSMUS	109	2019	USSR	19 FEB	27 FEB 66	
1966 0146 1966 0146		2024	USSR		_	
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1966 0150		2090	USSR		5 HAR 66	
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		2094	USSK	I MAR	2 MAR 66	
1966 018A		5002	Sn	9 MAR		
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1966 CL9A ACENA IAI	VENICE	2105	30		- 1	#
0208		2106	Sn	16 MAR	17 MAR 66	
1966 0236 CUSMUS 1	112	2107	USSR	17 MAR	ľ	
- 1		2108	1880 1880		25 MAP AA	
_		2110	A550	- 1	- 1	
1966 022A		2109	Sn	18 MAR		
6228		2112	83311	21 MAP	29 MAR 66	
623A COSMOS	113	2114	0.5.5R	- 1	9	
1966 023C		2117	USSR		22 MAR 66	
1966 0246		2386 3590	Sn	26 MAR	APR	
- 1		4004	Sn	1	4	
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COSHUS 114   2133   USSR   6 APR   14 APR 66 APR   12 APR 66 APR   12 APR 66 APR   14 APR 66 APR 66 APR   14 APR 66 APR 66 APR 66 APR 66 APR 66 APR 66 APR 66 APR 66 APR 66 APR 66 APR 66 APR 66 APR 66 APR		ı	•	1 901	60	, 111		1
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101AC         2564         USSR         2 NOV         9 NOV           101AF         2570         USSR         2 NOV         22 NOV           101AF         2571         USSR         2 NOV         29 NOV           101AF         2575         USSR         2 NOV         23 NOV           101AH         2576         USSR         2 NOV         23 NOV           101AH         2583         2 NOV         2 NOV         14 NOV           101AK         2583         2 NOV         14 NOV           101AK         2584         USSR         2 NOV         14 NOV           101AK         2584         USSR         2 NOV         12 NOV           101AK         2584         USSR         2 NOV         12 NOV           101AK         2584         USSR         2 NOV         12 NOV           101AR         2584         USSR         2 NOV         12 NOV           101AR         2584         USSR         2 NOV         14 NOV           101AR         2598         USSR         2 NOV         17 NOV           101AS         2538         2 NOV         17 NOV           101AS         2537         10 NO         2 NO			2562	USSR	i	Š	
101AF   2570   USSR   2 NOV   22 NOV   101AF   USSR   2 NOV   22 NOV   11 NOV   12 NOV   12 NOV   12 NOV   12 NOV   13 NOV   101AK   USSR   2 NOV   14 NOV   101AK   USSR   2 NOV   14 NOV   101AK   USSR   2 NOV   12 NOV   101AF   USSR   2 NOV   12 NOV   101AF   USSR   2 NOV   12 NOV   101AF   USSR   2 NOV   12 NOV   101AF   USSR   2 NOV   12 NOV   101AF   USSR   2 NOV   14 NOV   15 NOV   101AF   USSR   2 NOV   15 NOV   101AF   USSR   2 NOV   15 NOV   101AF   USSR   2 NOV   15 NOV   101AF   USSR   2 NOV   15 NOV   16 NOV   26 APR   USSR   2 NOV   2 NOV   2 NOV   2 NOV   2 NOV   2 NOV   2 NOV   2 NOV   2 NOV   2 NOV   2 NOV   2 NOV   2 NOV   2 NOV   2 NOV   2 NOV   2 NOV	1		2563	233T		\$ 2	
101AF			25.20	A550		Š	
101AK			2571	USSR		Ş	
101AK   101A	T		2575	8330	ł		
USSR   2 NOV   14 NOV   19 N	- 1		2570	USSK			
1014L         2583         USSR         2 NOV         14 NOV           101AH         2584         USSR         2 NOV         12 NOV           101AH         2585         USSR         2 NOV         14 NOV           101AP         2586         USSR         2 NOV         12 NOV           101AR         2587         USSR         2 NOV         16 NOV           101AS         2598         USSR         2 NOV         26 APR           101AS         2531         USSR         2 NOV         26 APR			2582	USSR	1	NOV	
101AH         2584         USSR         2 NDV         12 NDV           101AP         2586         USSR         2 NBV         14 NBV           101AP         2586         USSR         2 NDV         12 NDV           101AR         2598         USSR         2 NBV         17 NBV           101AS         2598         USSR         2 NBV         26 APR           101AS         2531         USSR         26 APR	1.		2583	USSR	- 1	- 1	
101AP   12 NOV   12 NOV   12 NOV   12 NOV   12 NOV   14 NOV   16 NOV   16 NOV   16 NOV   16 NOV   16 NOV   16 NOV   16 NOV   101AS   2 NOV   17 NOV   101AS   2 NOV   26 APR   101AS   2 NOV   26 APR   102A   26 APR   29 NOV   2			2584	USSR		2 2	
101AK 2587 USSR 2 NOV 16 NOV 101AK 101AS 2 NOV 17 NOV 101AS 2 NOV 17 NOV 101AS 2 NOV 26 APR 2931 USSR 2 NOV 26 APR 2931 USSR 2 NOV 26 APR 29 NOV 29 N	ı		2586	USSR	1	Ş	
101AK 2598 USSR 2 NOV 17 NOV 101AS 2 NOV 26 APR 101AS 2931 USSR 2 NOV 26 APR 20 NOV 29 NOV	1		2587	USSR	- 1	AQ.	
10.2 A NIV 29			2598	USSR			
			2537	SO		l	

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOT
1966 LAUNCHES	HES (CONT.)					
	GEMINI 12	2566	Sn	11 NOV	15 NOV 66	
1966 1040		2567	S		24	
1966 1048 1966 1048		2578 2579	S S	11 NOV		
- 1		2588		1	A DEC AA	
1966 1046		2589	SS		DEC	
		2591	S	11 NOV	18 NOV 66	
1966 104K		2592	S.A.	۲,		
		2593	S	11 NOV	NO.	
1966 104N		259 <del>4</del>	S	* †	₹	
1		7596		T	NOV	
		2597	S	11 NOV	18 NOV 66	
	בטאמט נטג	2569 2569	USSR	12 NOV	20 NOV 66	
	CO3MO3 132	2600	USSR	19 NOV	27 NOV 66	
1966 1078	193	2601 2602	USSR	- 1		
	COSMOS 134	2003	C S S S		ı	
		2604	USSR		DEC	
		2606	US	5 DEC	14 DEC 66	
1966 1108		2609	SN		15 DCT 74	
1966 1128	CUSMUS 135	2612 2615	USSR			
1966 1126		2616	USSR		4	
1		2700	0007	12 DEC	1	
1966 113A	a incarci, isc. i	2618	US			
1966 114B	סיוסאוברריוב ז	2623	Sn	14 DEC	23 JAN 67	
1966 1140 1966 1140		2619	50	14 DEC	2 2	
1966 115A		2624	WSSR	4	*	
	LUNA 13	2626	1558 1558	<b>+</b> 6	1	
1		2628	USSR		DEC	
	COSMUS 137	2627	USSR	21 DEC	23 NOV 67	
1966 118A		2634	US R		5 APR 69	
1966 1186		2635	80		11 A	

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
		0470		***	13 404 67	***
1		0407	50		E E	
		1497	SD SD	ı		
1967 001F		5122	Sn	11 JAN		
- 1		5123	Sfi	1	1	
		5245	0.5	11 JAN	29 OCT 78	
1967 0014 1967 001K		5333	Sn			
		5735	311	1	4	
		5766	Sn:	-	-	
1967 001N		5951		1	26 HIN 73	
_		5960	\$ 0 E	11 JAN	NOT THE	
- 1		1966	311	[. ]		
		9969	20.	- 1		
1967 0024		2642	SO	Ĭ	2 FEB 67	
- 1		2662	3n	ı	*	
	C0SM0S 138	2646	USSR	19 JAN	27 JAN 67	
- 1	1	2648	X440	25 JAN	NAL	
	COSMOS 139	2020	033K		1	
1967 0050		2659	USSR			
		2664	Sn	1	12 558 67	
_		2665	SO	2 FEB 5 EEB	4 FEB 07	
1967 C08A	COSMON 140	2667	USSR	7 FEB	_	
- 1		2669	USSR	•		
		2673	FRANCE	80 c	13 DEC 67	ABA
- t		2675	TARKE	9 650	7	
		2676	FRANCE	- 1		
1967 0116		2688	FRANCE		22 JUN 80	
1		3690	FRANCE	1	¥;	
_		2691	FRANCE	8 FEB	29 UCI 67	
		2900	ED ANDE	A FF8	FE8	
		2343	FRANCE	8 5 6	AUG	
1967 0110		6004	FRANCE		NON NO	
- 1	COSMOS 141	2670	2330		14 558 67	
1967 0128		2672	32 CO	16 550		
- 1	COSMUS 142	26.79	USSR	ŀ		
		2683	FRANCE	- 1	9EP	
1967 0146		2683	FRANCE		N S	
- 1		3589	FRANGE			
		3935	FRANCE	15 FEB	2 AUG 81	
		2680	SO		6 MAR 67	
1967 OLOA	COCMOC 14.2	2693	US5R	27 FEB	7 MAR 67	
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	APR		CISSR	2750	CISMUS 155	1967 0334
	<b>A</b> ?		1500 1500 1500 1500 1500 1500 1500 1500	7766		Γ
	9 APR 67	8 APR	8551	2747	CUSMUS IST	
			SO	2744		
	2 SEP	1	95	2743	ATS 2	1967 031A
	A PR	♣ APR	LISSR	2742	COSHOS LOS	MOE 0 1961
	17 APR 67	30 MAR	US	2736	1	
	*	- 1	055k	6242		1967 0288
	AUG.	25 MAR	USSR	2722	COSMOS 152	1967 028A
	10 AUN 97	C4 MAR	CUUX	2703		· `
	- 1	۲,	93	11704		- 1
	ב	23 MAR	S	2719		
	147	ግ	USSR	2718	1	
		2	USSR	2715	COSMOS 150	_
		T'	#55B	7740		ı
	31 MAR 67	21 MAR	BSSII NECO	2748		1967 024K
			USSR	2738		
	27 HAR 67	7	USSR	2737		- 1
	I AR		USSR	2734		-
	**	1	USSR	2733		1
	9 APR 67	21 MAR	MSSE	2732		1967 0248
	A PR		USSR	2730		
	\$	- 1	USSR	2729		- [
	MAR		USSR	2728		•
			0.07	444		1701 0275
	27 MAR 67	- 1	dəşili Neco	2726		- 1
	I A	21 MAR	USSR	2724		
青	1		U558		- 1	- 1
			USSR	2714	COSMOS 149	1967 024A
	7 HAT 67	16 FAX		7117	CUSMUS 148	Γ `
	٠4		0558	1112	Į	- 1
	MAR		USSR	2710	COSMOS 147	-
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10 10	4668	2015		1967 0216
	M A	- 1	HECB	2709	CUSRUS 140	4
	LAN		SO	2987		. ~
	****	- 1	8.0	2704		1967 0208
	APR		SS	2703	080 3	~
		3 147	U\$\$8	2698	;	Γ
	B MAR AR	מיובט.	8551	2697	COSMOS 145	1967 0196
	SEP		USSR	2695	COSMOS 144	•
					S (CUNT.)	1967 LAUNCHES
NOTES	DE,CAY	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION
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TAMOTTAN		30 14 143				
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1967 LAUNCHES	ES (CONT.)					
1967 0330		2752	USSR	12 APR		
		2753	330 311	12 APR	20 047	
1967 C34F		5718	50	14 APK		
1967 035A	SURVEYOR 3	2756	Sn			*
		2759	USSR	23 APR	1	*04
1967 0378	CAN MADED 3	2760	USSR	23 APK 36 APB	24 APK 67	
		1772	Sn	_		;
1	- 1	2772	SA	1		<b>\$</b>
	ARIEL 3	2773	Ž Č	5 MAY 5 MAX	14 DEC 70 6 DEC 70	
1967 0426		2859	Sn	1		
1967 0420		2860	30		A A A	
		2779	S	9 MAY	13 JUL 67	
1967 044A	COSMOS 157	2781	USSR	l	_	
- 1	'	2782	USSR	- 1	¥	
		2783	UŠSR		Ψ,	
		2784	8330	X	10 447 67	
1967 044E	COSMOS 169	2805	033K	17 MAY	X X	
1		2804	USSR			
		2803	USSR	- (	1	
		2808	USSR	17 MAT	22 HAT 07	
1967 046F		2924	USSR			
- 1	COSMOS 160	2806	USSR	- 1	- 1	
		2810	USSR	17 MAY	18 MAY 67	
1967 0498		2814	USSR		_	
		2813	30			
		2816	Sin	22 HAY 24 MAY	27 HAY 67	
1967 052A	MOLNIYA 1-5	2822	USSR	24 HAY		
		2818	USSR			
		2819	USSK	24 MAY	15 JUN 67	
1967 0520		2821	USSR	1.	1	
1901 UDZE 1967 OE3E		3224	USSR	4	- 1	
		5439	USSR	_		
- 1	CUSMOS-162	2827	USSR	**************************************	1	
		2829	USSR	1 JUN	4 JUN 67	
1967 0546		2831	SN	NOC 4	12 JUN 67	
- 1		2835	ns	ſ	3	
	C05M0S 163	2832	USSR	NO S	11 OCT 67	
1967 0968		2836 3836	7660 1678	•		

	9 AUG 67	8 AUG	USSR	2912		0776
	AUG	7 AUG	15.50	1911	COSMOS 171	0774
	, d	7 100	211	2923		•
G#		I AUG	CV	1062	2701-7	
	*	35 15	055X	2002	HINAR DEBITER S	1967 0754
		31 JUL	USSR	2905		c
	- 1	-1	USSR	2904		- 1
			USSR	2903		
			USSR	2902	COSMOS 170	1967 0744
	15 MAY 74	28 JUL	S	2896		c i
			03	2005	060 4	
	4	ľ		1062	71 150	1967 0726
1 1	MAY	_	CS	2897		1901 0120
	15 NOV 70	27 JUL	80	2894		
IV:		•	S	2893	UV1-86	072A
<b>~</b>		ł				7718
<b>.</b>	16 OCT 67	25 JUL	CS	2892		-
<b>.</b>		[	03	2897		- [
•	\$	- 1	116	2890		•
)십			USSR	2882		1907 0696
	4	17 305	W650	1992		٦,
io	18 JUL 67	17 JUL	USSR	2880		
	ŀ	17 JUL	USCR	2079		- 1
ф <b>†</b>	\$	14 000	63311	2878	COSMOS 169	1967 069A
	ي	<b>→</b> JUL	USSR	2871	CHO 4C KOV.	1907 0076
	4	4 886	USSR	2070		
	֖֖֝֞֝֟֝֓֟֝֟֝֟֝֟֝֟֝֟֝֓֓֓֟֟֝֓֓֓֟֟ ֓֓֓֓֓֓֓֞֓֓֓֞֓֓֞֓֓֓֓֞֓֓		UŠSR	2869	COSMOS 168	. ~
	10 NON 01	20 40		2050		
		17 1110	11558	2857		
	Š	17 JUN	USSR	2854		1967 0035
	<b>₫</b>	17 601	USSR	2056		
	J C	17 JUN	USSR	2853		
	2	1	USSR	2852	CBSMOS 167	1967 0034
	22 OCT 68	16 JUN	SO	2851		-
	OCT	_	USSR	5050		1967 0624
			ussa	2048		- 1
	1 NOV 67		USSR	2843		
		NOF 21	TCC0	2042	CBSMBS 165	1
	<b>₽</b>	- 1	0.55K	24 <b>6</b>		-
-	NOL		USSR	2841		1967 0588
Ė		1	USSR	0405	VENERA 4	- 1
	9 JUN 67	NOF 8	USSR	2838		. ~
					S (CONT.)	1967 LAUNCHES
NOTES	DEÇAY	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION
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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOIES
1967 LAUNCHES	ES (CUNT.)					
1967 0770		2915	USSR	B AUG	8 AUG 67	
- 1	-1	2916	85511	9 AUG	AUG	
	COSMOS 172	2914	ASSU MSSU		AUG	
1967 0794		2919	Sn		AUG	
- 1	COSMOS 173	2921	USSR	- 54 AUG	30 001 67	
_		2922	USSK	24 AUG		
1967 0824	CUSHUS 1 (A	2926	USSR			
1		2927	USSR	ı		
		2928	USSR	31 AUG	5 SEP 67	
- 1		ANN ANN	511	7 SEP	9 SEP 67	
	CAPSULE	NINA 2026		7 SEP	- 1	
1967 084A	SURVEYOR 5	2937	Sn	_	SEP	*-
- 1	*	2939	USSR		1	
		2941	USSR	11 SEP	23 SEP 67	
	771 307307	2942	UŠSR			
		2045	UEER	- 1	.L	
1967 386C		2944	USSR	12 SEP	4 OCT 67	
- 1		2956	X440	١	APR	
		2951	USSR	- 1	HAR	
1967 0866		2959	USSR		2 APR 68	
- 1		-5968	USSA		3	
		2961	USSR	12 SEP 12 SEP	19 NAV 61	
		2983	USSR		4 NOV 67	
196/ UBOL		2984	USSA	- 1	١.	
		2946	Sn	15 SEP 14 SEB	24 SEP 67	
	COSMOS 177	2048	ÜSSR	16 SEP		
	87 L 308307	2951	USSR		499	
1967 089B	out caucha	2953	USSR	19 SEP	20 SEP 67	
_ [		2954	85511	i	SÉP	
		2722	30	- 1	4	
1967 6964-	CDSMUS 179	2962	USSR	22 SEP		
- 1	- 1	2963	USSR	22 SEP	22 SEP 67	
_	:	2964	U33K	- 1	130	
1967 0934	CBSMBS 1 89	2968	USSR			
1967 0938		2970	30	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	37 OCT 67	
١.		2972	US 1950	28 SEP	- 1	
- 1	MOLNI YA 1-6	2026	ACCO.		LOC .	
		2914	USSR	- 1	130	
1967 0995		3225	USSR		10 FEB 69	
			1000			

DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTE
1967 LAUNCHES	S (CONT.)					
-		2982	USSR		· 1	
- 1	CONCO TOZ	2996	USSR	16 007	24 OCT 67	
-	COSMOS 183	3001	USSR	18 007	24 0CT 67 18 0CT 67	
_ ]		3003	USSR	18 007	18 OCT 67	
1967 100A	050 4	3004	S S		Y A H	
1967 101A	MOLNIYA 1-7	3008	USSR		1	
1967 1016		3006	US5R		- 1	
t		3009	USSR		#	
1967 103A		2106	0007		20 200	JE
	COSMOS 185	3013	USSR			
		3015	UŠSR	27 OCT	29 DCT 67	<b>АИ</b> 00
1967 106B	יטז כטחכט	3010 3017	USSR		28 OCT 67	
	COSMOS 188	3020	USSR	30 OCT	2 NOV 67	a AU
	CUSMOS 189	3021	USSR	- 1	NON	
		3028	USSR		N N	
		3042	USSR	30 OCT	24 JUN 68	
		6696	USSR	- 1	ſ	
		6698	USSR		7.7	
1		6701	USSR		10 FEB 74	
1967 109B		302 <b>4</b> 3025	Sn S9	Z NOV	2 DEC 67	
- 1	CO3MOS 190	3026 3027	USSR		9 NOV 67	
	SURVEYOR 6	3031	SO		10 NDV 67	<b>1</b>
1967 113B	# OL E 0 4	3033	Sn	ADN 6	9 NOV 67	4
1967 115A	CB 5M35 191	3043	USSR USSR	21 NOV	TA TAN 68	
	COSMUS 193	3052	USSR		3-06-6	
1967 1168	HRESAT	3054	AUSTRE		1 DEC 68	
	CUSMOS 194	3055	USSR	3 DEC	DFC	

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1967 LAUNCHES	IES (CONT.)		;			
1	043-6	3057	sn	i	i	
1967 1208		3059	311	5 DEC	B ANK BE	
1		3005	SI	- 1		
		3062	Sn:		HAR	
1967 121A		3063	US	9 050	1 2 3 3 3 3	
	TATS 1	3067	3ñ		- 1	
		3068	Sn	13 DEC	APR	
1967 123F		3070	Sn	13 DEC	12 FEB 68	
- 1	461 SOMS 03	3071	USSR	- 1	9	
		3072	USSR		DEC	
1967 1254	APT SUMSUS	3074	USSR	19 DEC	7 JUL 68	
- 1	:	3075	USSR	- 1		
		3076	USSR		NY	
		3077	HSSO	•		
		3078	S S S S	19 DEC	7 JAN 68	
1047 1240		2000	dooii	26 DEC	Z	
- 1		2005	4557 4557		89 NYT 01	
		3084	USSR		NAD	
		3085	USSR		4	
		3086	USSR	26 DEC	26 JAN 68	
1967 126H		3089	USSR		30 DEC 67	
ı		3090	ASSI		9	
		3082	USSR	_		
1967 1276		3088	133n	31 050	390 15	
					'	•
	SURVEYOR 7	2000	door	NAL AL	1 FFR 68	1
1966 003A	- 1	9605	USSR	- 1	- 1	
		3115	USSR	-	JAN	
		3117	#350	•	Ι.	
		3097	50	17 JAN	20 MAR 68	
1968 0040		3116	Sn	17 JAN		
- 1		3098	Sn	1	9	
	CUSM05 200	3100	USSR	19 JAN	24 FEB 73	
1968 CC60		3163	USSR	ľ	-	
l		3104	USSR	- 1	-	
		3109	USSR	•		
- 1		3110	USSR	NAME OF THE PERSON OF THE PERS	80 NOT 01	
3730 070						

LAUNCHES (CONT.)  OUZH LH-L/ASCENT 3106 US 22 JAN 21 JAN 6008 1117 US 22 JAN 21 JAN 6008 1117 US 22 JAN 21 JAN 6008 1117 US 22 JAN 21 JAN 6008 1117 US 22 JAN 21 JAN 6008 1117 US 22 JAN 21 JAN 6008 1117 US 22 JAN 21 JAN 6008 1117 US 22 JAN 21 JAN 6008 1117 US 22 JAN 21 JAN 6008 1117 US 22 JAN 21 JAN 6008 1117 US 22 JAN 21 JAN 6008 1117 US 22 JAN 21 JAN 6008 1117 US 22 JAN 21 JAN 6008 1117 US 22 JAN 21 JAN 6008 1117 US 22 JAN 21 JAN 6008 1117 US 22 JAN 21 JAN 6008 1117 US 22 JAN 6008	DESIGNATION	NAM	CATALOG NUMBER	SUBIRE	I AINCH	DECAY
LANNCHES (CONT.)   1306						C+ 42.
O(7)	1968 LAUNCH	(CONT.				
NOTE   CHARGESTERM   3107   US 22 JAN   23 JAN     NOTE   CHARGESTERM   3107   US 22 JAN   23 JAN     NOTE   CHARGESTERM   3117   US 22 JAN   23 JAN     NOTE   CHARGESTERM   3117   US 25 JAN   24 JAN     NOTE   CHARGESTERM   3117   US 25 JAN   24 JAN     NOTE   CHARGESTERM   3117   US 25 JAN     NOTE   CHARGESTERM   3117		LM-1/ASCENT	3106	US		NAV
Colone   C		LW 170ESCENT	310A 310A			
ORGINICATION   1114   115	1			US .		
CONTROL CONT			3114	S		MAR
ORDER   ORDE		- 1	3118	USSR	- 1	
Olio   Cushus 202   3128			6116	USSR	1	#
OTTO			3128	USSR		MAR
1136   1315			3147	USSR	- 1	¥ *
113C	1968 0138			W55R		**
OTTO   OTTO			3136	USSR		
1156   COSMOS 205   3140   USSR   5 MAR   13 OCT     1160   1160   USSR   5 MAR   13 MAR     1160   USSR   5 MAR   13 MAR     1176   USSR   5 MAR   25 MAR     1176   USSR   5 MAR   25 MAR     1176   USSR   5 MAR   25 MAR     1176   USSR   USS   5 MAR   25 MAR     1176   USSR   USSR   16 MAR   25 MAR     1177   USSR   16 MAR   25 MAR     1177   USSR   16 MAR   25 MAR     1177   USSR   21 MAR   25 MAR     1177   USSR   21 MAR   25 MAR     1177   USSR   21 MAR   25 MAR     1177   USSR   21 MAR   25 MAR     1177   USSR   21 MAR   25 MAR     1177   USSR   21 MAR   25 MAR     1177   USSR   21 MAR   25 MAR     1177   USSR   22 MAR   25 MAR     1177   USSR   22 MAR   25 MAR     1177   USSR   22 MAR     1177   USSR   22 MAR     1177   USSR   22 MAR     1177   USSR   23 MAR     1177   USSR   24 MAR     1177   USSR   25 MAR     1177   USSR   3 MAR     1177   USSR   3 MAR     1177   USSR   3 MAR     1177   USSR   3 MAR     1177   USSR   3 MAR     1177   USSR   3 MAR     1177   USSR   3 MAR     1177   USSR   3 MAR     1177   USSR   3 MAR     1177   USSR   3 MAR     1178   USSR   3 MAR     1178   USSR   3 MAR     1179   USSR   U			3139	USSR	- 1	MA A
11	- 1		3143	USSR	- 1	#
1178   3145   US	ı	USMUS	3140	COUR	i i	I A R
1017E   5743			3140	S,		DEC
10   10   10   10   10   10   10   10			32 <u>1</u> /5	58	- 1	3
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OZZIA         COSMOS 207         3154 3154         USSR USSR 3156         16 MAR 3157         24 MAR 24 MAR 25 MAR 27 MAR 27 MAR 27 MAR 28 MAR 29 MAR 2			3152	SS		APR
DEZIN   CUSMUS 208   3156   USSR   21 MAR   2 APR   22 MAR   22		~	3154	USSR		H A
No. 220   3167   USSR   21 MAR   25 MAR   22 MAR   23 MAR   23 MAR   23 MAR   23 MAR   23 MAR   23 MAR   23 MAR   23 MAR   23 MAR   23 MAR   23 MAR   23 MAR   23 MAR   23 MAR   23 MAR   23 MAR   23 MAR   23 MAR   24 MAR   24 MAR   24 MAR   24 MAR   25 MAR   24 MAR   25 MAR   24 MAR   24 MAR   25 MAR   24 MAR   25 M			3156	USSR	1	APR
D236   D236   D236   D237   D238   D236   D236   D236   D237   D238	- 1		3167	USSR	•	APR A
Decide			9160	WSSB		1
023E         3165         USSR         22 HAR         4 HAY           024A         CBSMBS 210         3169         USSR         3 APR         11 APR           024B         3169         USSR         3 APR         12 APR           024C         3172         USSR         3 APR         2 APR           025C         3171         US         4 APR         25 APR           025B         3185         US         4 APR         25 APR           025C         3187         US         4 APR         28 APR           025F         3189         US         4 APR         20 APR           025G         3191         US         4 APR         20 APR           025G         3191         US         4 APR         17 APR           025G         3192         US         4 APR         17 APR           025G         3193         US         4 APR         17 APR           025G         3193         US         4 APR         17 APR           025G         3195         US         4 APR         17 APR           025G         3193         US         4 APR         22 APR           025G         3193			3161	USSR	1	MAR
024A         CBSMOS 210         3160         USSR         3 APR         11 APR           024G         3169         USSR         3 APR         12 APR           025G         3172         USSR         3 APR         2 APR           025G         3171         US         4 APR         25 APR           025G         3185         US         4 APR         25 APR           025G         3187         US         4 APR         28 APR           025G         3187         US         4 APR         29 APR           025G         3189         US         4 APR         29 APR           025G         3190         US         4 APR         20 APR           025G         3191         US         4 APR         17 APR           025G         3195         US         4 APR         17 APR           025G         3195         US         4 APR         17 APR           025G         3195         US         4 APR         22 APR           025G         3195         US         4 APR         22 APR           025G         3195         US         4 APR         22 APR           025G         3195			3165	USSR	1	¥
O246   3169   USSR   3 APR   12 APR   13 APR		COSMOS 210	3160			**************************************
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D256   3171   US			3170	US S		APR
O256   O256   O256   O256   O256   O256   O257   O256   O256   O257   O256   O257   O258			3185 3185	50	- 1	
025E 3187 US 4 APR 29 APR 29 APR 20 APR 20 APR 27 A	- 1		3186	88	- 1	HAY
0256     3189     US     4 APR     20 APR       0258     3190     US     4 APR     17 APR       025K     3191     US     4 APR     17 APR       025K     3195     US     4 APR     17 APR       025K     3195     US     4 APR     17 APR       025K     3195     US     4 APR     22 APR       025K     3195     US     4 APR     22 APR       025K     3195     US     4 APR     22 APR       025K     3195     US     4 APR     22 APR       025K     3195     US     4 APR     22 APR       025K     3195     US     4 APR     3195			3187	CS	A APR	SEP
325H     3190     US     4 APR     17 APR       325J     3191     US     4 APR     17 APR       025K     3192     US     4 APR     17 APR       025K     3195     US     4 APR     22 APR       025M     3197     US     4 APR     22 APR       025N     3197     US     4 APR     22 APR       025N     3197     US     4 APR     22 APR			3189	Sn	` ]	A A
3191     US     4 APR     17 APR       025K     3192     US     4 APR     17 APR       025L     3195     US     4 APR     22 APR       025H     3196     US     4 APR     22 APR       025N     3197     US     4 APR     22 APR       025N     3197     US     4 APR     22 APR	- 1		9616	88	+ +57	***************************************
025L 3195 US 4 APR 11 MAY 025H 3195 US 4 APR 22 APR 025N 3197 US 6 APR 22 APR	I		3191	S	4 APR	A PR
025M 3196 US 4 APR 22 APR			3195	C S	↑ APR	MAY
			3196	C C	* *PR	3

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1968 LAUNCHES (C	(CONT.)					
		3200	Sn	4 APR	17 APR 68	
1968 0258		3202	SN	4 APR	L	
- 1		3179	USSR	7 APR	404	
027C		3180	USSR	7 APR	9 APR 68	
1968 028A CUS 1968 028B	CUSMUS 211	3182	USSR		AUG	
4670	COSMOS 212	3183	USSB	ļ	8 3	
0296		3184	USSR	14 APR	16 APR 68	
1968 0308 CUS		3194	USSR		APR	
4160		3199		17 APR	8	
032A	COSMOS 214	3203	USSR	18 APR	26 APR 68	
1968 033A COS	COSMOS 215	3205	USSR	7	N N	
9338	- 1	3206	USSR		* 6	
034A	COSMOS 216	3207	USSR	20 APR	28 APK 68	
1968 0348 MOI	MOLNIYA 1-8	3209	USSR		NY	
25.0	۱ ٔ	3211	- NSSA	1	**	
		3210	USSR	21 APR	29 MAY 68	
1968 0350	CDSMDS 217	3216	USSR	Γ	APR	
0.324	- 1	3217	US SR	- 1	<b>844</b>	
0378		3219	USSR	25 APR	25 APR 68	
1968 038A COS	COSMUS 219	3220	USSR	1	HAR	
8860		3221	USSR		1	
		3227	USSR	26 APK	3 JUN 08	
1968 0398		3232	Sn	T HAY	20 MAY 68	
1		3222	115	17 MAY	31 MAR 70	
1968 0418		3265	30		Ž	
043A	COSMUS 221	3269	USSR	24"HAY	31 AUG 69	
1968 0438	COCMUC 222	3272	USSR	!	00.1	
8 4 4 6	;	3273	MSSN	20 MAX	3	
045A	COSMOS 223	3274	USSR	NOC 1	9 JUN 68	
1968 0458 CDS	COCMOC 224	3276	USSR	NOC 4	_	
4040	- 1	3277	USSR	- 1	3	
047A		3278	SO	5 JUN	17 JUN 68	
1968 0484 CB	COSMOS -225	3280	USSR	NOC 11	AUG	
- 1		3281	USSR	1		
0440		3293	USSR	11 JUN	21 JUN 68	
N494	COSMOS 226	3282	4500	Ī	3 =	
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3296	Sn	20 JUN	16
3298 3298	USSR	NOT 12	3 JUL 6
3299 3299	USSR	NOF 12	24 JUN 23 JUN
3302	USSR	ı	- 1
3303	2558 2555	1	NOC 52
3306	USSR		
3305 3305	USSR	- 1	<b>→</b> JUL →
3300	USSR	- 1	
3309	USSR	5 JUL	16 OCT
3311	USSR	9 JUL 9	9 AUG
3313	USSR	9 JUL 9	90 JUL 8
3515	UŠSR	1	2 SEP
3316 3317	USSR		- 1
3318	SA	- 1	•
3320	US 05	11 JOE	904 91 908 61
3321	Sn		ı
3323	USSR		26 שער
3327	USSR		NVF 1
3333	USSR	- 4	7 AUG
3336	SO	7 AUG	27 AUG
3337	S	- 1	•
3339	USSR	ł	_
3344	S S S		17 001
3348	USSR	. 1	♦ SEP
3351	USSR		1
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3353	USSR		13 SEP
3376	NS SA		- 1
9388	USSR	1	23 257
3389	USSR	-	17 SEP
3395	U55K	- 1	435 42 435 12
	3296 3297 3298 3300 3300 3300 3300 3311 3311 3311 3317 3318 3327 3327 3327 3327 3339 3344 3344 3348 3351		USSR 20  USSR 21  USSR 21  USSR 21  USSR 21  USSR 21  USSR 21  USSR 21  USSR 26  USS

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1968 LAUNCHES	ES (CONT.)					ł
1968 0760		3397	USSR		SEP	
	COSMOS 241	3398	8889	14 550	22 CED AR	l
		3344	255 255	օգե		1
1968 078B		3409	S		SEP	
- 1	CDSM05 242	3414	HSSN	- 1	ADN	1
		3415	USSR	20 SEP		
- 1	CDSM05 243	3418	*****	1	30 00	l
		3419	USSK	23 SEP 21 SEP	Ī	ł
1968 0818	FR 5 28	36.76	SD		FEB	
	, 1	5999		ı	MAR	-
	COSMOS 244	3449	USSR	2 OCT		
1968 C828 —		3451	USSR	1	<u>ا</u> ا	ł
		3450	USSR		2 UCT 68	į
1		24.50	ASSII	4 OCT	AUN.	
1968 U838	ESB0 1	2450	ASSO CBOR	- 1	3	ı
ı		3460	SO	3 001	AUG	
- 1		3479	30	3 061	4	1
		3916	Sn	3 OCT	9 MAY 69	
	MOLNIYA 1-10	3469	33.55		30 OCT 68	ı
1968 0858		3470	USSK	5 001		1
1968 0850		3513	USSR	5 OCT	-	
1969 686A		3472	30	138 4		
	COSMOS 246	3473	USSR	7 OCT	12 UCT 68	
1968 CB78	CDSMOS 247	3484	USSR	11 OCT	2	
		3485	USSR	11 001	3	1
	APOLLO 7	3486	Sn	11 OCT	22 OCT 68	ă. 1
1968 0898	COCMOC 240	3503	USSR	19 OCT	FEB (	
1968 090H	;	3571	USSR	- 1	4	,
		3572	USSR		FEB	
1968 6900		3573		100 00	12 057 40	•
		3580	45.CD			
1968 0918		3518	USSR			
- 1		3519	USSR		6 MAR	
		3520	USSR		29 MAY 81	
1968 U91K		3521	**************************************		1 1 1	
		3525	USSK	20 DC 1	- 1	
1968 3916 1368 6910		3582	USSR			
1		3586	USSR	- 1	MAR	
		3588	USSR			
- (		3677	NSSN	20 05	29 HAT 80	
		c f \cdot			2	

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1968 LAUNCHES (C	(CONT.)					
1968 097AK		3696	USSR	NON I	MAR	
		3704	#\$\$D	ACM -	32 400 40	
		2712	USSE	ACM T		
1968 C97AR		3714	USSR	NON T		
- 1		3715	USSR		990	
_		3716	USSR	NON T		
1968 097AY		3786	USSR			
		3787	US 58	ADN T	12 NUV 62	
ļ		2016	455H	ACN I		
		2012	855D	XON .	; <b>\$</b>	
1968 09/05		3817	USSR	NON I		
		7886	8550	NON T	12 NOV 82	
		3897	USSR	NON T		
1968 0978P		3902	USSR	- X0X		
		3903	USSR	70X		
		3904	****	*04 -	27 MAY 40	
		3946	100 E	ADN T	ADD B	
1		2070	dooii	NON I		
1968 0978V		2007	8330	XOX	- 1	
		4010	USSR	NON T	SEP	
- 1		4011	USSR	- A04 -		
		4012	USSR	NON T	9 MAR 79	
		4013	######################################	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	20000	
		4030	USSK	NOW T	о <b>ф</b>	
1968 097CG		5030	USSR	NON T	FEB 7	
- 1		5334	USSR			
		5418	USSR	ADN T	19 NOV 82	
1		1000	20011	YON -	A EEB 78	
		5515	ASSO USSB	XON T		
1968 097CS		5517	USSR	NON	DCT	
- 1			USSR	NON T		
1968 097CU		5592	USSR	A 20 2	22 JUL 79	
		5594	do sti	YUN I	100	
		1000	45.50	MON	4	
1		5749	USSR	ADN T	. •	
		5100	8550	ADN T	- 1	
1968 0970C		5790	USSR	NOV T	AUG	
- 1		5827	USSR	704	3	
		5828	USSR	702	19 NOV 82	
1		9659	doul!	AUN I	FFB 7	
		5830	US 58	ADN-1	3	
1968 0961		5873	8880	NON T	NOT	

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			USSR	3634		6	1968 1176
			USSR	3633		Th.	1968 117F
	2	#	USSR	3632			1968 117E
	FE8	9	USSR	3631		<b>D</b>	
				3626		•	1
AF#	Z I		USSR	3625	CO31103 CO1		1968 1178
	12 100 13	17 050	100	8166	WD C - 26.1		
		ŀ	033K	2020		, d	- 1
			USSR	3621		. C	
	#	- 1	USSR	3620			-1
	שׁר	16 DEC	USSR	3619	MUS 26v	A COSMUS	
	*	1	USSR	3614			1
	10 MAY 69	14 DEC	(18.88 (18.88)	3613	HUS 237	R COSTOS	1968 1138
4	78 DEC 98	1	Co	3604			l
!!   	4	- 1	U55R	3603		8	- 1
רוו	DEC	10 DEC	USSR	3602	MOS 258	A COSMOS	
A	<b>A</b>	1		3596			-
₽Ą Uζ	28 OCT 75	5 DEC	ESRO	3595	S-A1	A HEOS-A1	
	_	ש טבר	USSR	35/9		0	1968 1078
AC.	*	4	055R	9576	COSMOS 257		- i
)Oc 'N!			USSR	3575			
4		1	USSR	3574	COSMOS 255		1
<b>J</b> (	27 NOV 68	21 NOV	SSS CO	3563	במשומט בשי		1968 1048
)	i	1	USSR	3595	40C 2E4		١.
	4		0558	4565	PROTON 4		
	VOV		USSR	3543			
	*	1	HSSR	3542	COSMOS 253		
	NOV		USSR	3539		m (	
	13 NOV 68	10 NOV	USSR	3537		C	1968 ICIC
	#	TO NOT	USSR	3536		-	- 1
C*	VOV		USSR	3535	D 6	A ZONO	
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	SEP	_	S	3534	R 2	B TETR	i
	#	1	88	3532		*	
	23 NOV 68	3 NOV	SS	3531		<b>&gt;</b> 6	
	JAN	ADN 1	USSK	2966			10/60 8961
	*	- NOV	055R	5091		3	- 1
	MAR		USSR	5890		DR.	
	<b>1</b>	1	USSR	5889		3	
	9 MAY 81	1 VOV	USSR	5875		0P	1968 0970P
					(CONT.)	LAUNCHES (CO	1968 LAU
NOTES	DEÇAY	LAUNCH	SOURCE	NUMBER	NAME	NOI	DESIGNATION

NUMBER   SOURCE   LANGER   DULAT	MATIONAL					7.00	2011
LAUNCHES (CONT.)   26.37   UUSSR   19 DEC   22 JAN 69     117	DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DBCAT	
17   17   18   18   19   10   10   10   10   10   10   10		(CONT					
17   17   17   17   17   17   17   17	968		3637	USSR		NAN	
1177   150.99   105.87   15   15   15   15   15   15   15   1	4		3638	8330		2 3	
117   177			3639	USSK	19 DEC		
1172   1174   1175   1174   1175   1174   1175	1		3641	USSR		HAY	
1177   1178   1945   1958   1966   1948   1978	í		3644	USSR		4	
1171   177			3645	USSR		A A A	
1177   1779   1750   1755   1756   1757			3698	USSR		MAR	
1177   1777	- 1		9700	US5R		A V	
11			3703	USSR		FEB	
1117	ł		3705	ACCO.	l	FEB	
1177   APPRILED   5766   USSR   19 DEC   1 MR 69     1174   CUSSMUS 262   3629   USSR   20 DEC   18 JUL 69     1174   CUSSMUS 262   3629   USSR   20 DEC   18 JUL 69     1175   CUSSMUS 262   3649   USSR   20 DEC   18 JUL 69     1176   CUSSMUS 262   3649   USSR   20 JAN 69     1176   CUSSMUS 262   3649   USSR   10 JAN 11 JAN 69     1177   CUSSMUS 263   3649   USSR   10 JAN 11 JAN 69     1177   CUSSMUS 263   3649   USSR   10 JAN 11 JAN 69     1177   CUSSMUS 263   3649   USSR   10 JAN 11 JAN 69     1177   CUSSMUS 263   3649   USSR   11 JAN 69     1177   CUSSMUS 263   3649   USSR   11 JAN 69     1177   CUSSMUS 263   3649   USSR   11 JAN 69     1177   CUSSMUS 263   3649   USSR   11 JAN 69     1177   CUSSMUS 264   3649   USSR   11 JAN 69     1177   CUSSMUS 265   3649   USSR   11 JAN 69     1177   CUSSMUS 265   3649   USSR   12 JAN 18 JAN 69     1177   CUSSMUS 265   3649   USSR   25 JAN 69     1177   CUSSMUS 265   3649   USSR   25 JAN 69     1177   CUSSMUS 265   3649   USSR   25 JAN 69     1177   CUSSMUS 265   3649   USSR   25 JAN 69     1177   CUSSMUS 265   3649   USSR   25 FEB   4 MR 69     1177   CUSSMUS 267   3765   USSR   25 FEB   4 MR 69     1177   CUSSMUS 267   3765   USSR   25 FEB   4 MR 69     1177   CUSSMUS 267   3765   USSR   25 FEB   4 MR 69     1177   CUSSMUS 267   3765   USSR   25 FEB   4 MR 69     1178   CUSSMUS 267   3765   USSR   25 FEB   26 FEB     1177   CUSSMUS 267   3765   USSR   25 FEB     1177   CUSSMUS 267   3765   USSR   25 FEB     1177   CUSSMUS 267   3765   USSR   25 FEB     1177   CUSSMUS 267   3765   USSR   25 FEB     1177   USSR   25 FEB   26 FEB     1177   USSR   25 FEB   26 FEB     1177   USSR   25 FEB   26 FEB     1177   USSR   25 FEB   26 FEB     1177   USSR   25 FEB   26 FEB     1177   USSR   25 FEB   26 FEB     1177   USSR   25 FEB   26 FEB     1177   USSR   25 FEB   26 FEB     1177   USSR   26 FEB   26 FEB     1177   USSR   25 FEB   26 FEB     1177   USSR   25 FEB   26 FEB     1177   USSR   25 FEB   26 FEB     1177   USSR   25 FEB   26 FEB     1177   USSR   25 FEB   26 FEB     117			3710	7550 8230		4	
1194   COSMOS 262   3626   USSR   26 DEC   18 JUL 69     1194   COSMOS 262   3629   USSR   26 DEC   18 JUL 69     1195   COSMOS 262   3629   USSR   26 DEC   18 JUL 69     1196   COSMOS 262   3643   USSR   26 DEC   30 APR 69     1197   COSMOS 262   3643   USSR   2 JAN 69     10016   VENERA 5   3643   USSR   2 JAN 69     10016   VENERA 6   3649   USSR   2 JAN 69     10016   VENERA 6   3649   USSR   2 JAN 69     10016   VENERA 6   3649   USSR   2 JAN 69     10016   VENERA 6   3649   USSR   2 JAN 69     10016   VENERA 6   3649   USSR   2 JAN 69     10016   VENERA 6   3649   USSR   2 JAN 69     10016   VENERA 6   3649   USSR   2 JAN 69     10016   VENERA 6   3649   USSR   2 JAN 69     10016   VENERA 6   3649   USSR   2 JAN 69     10016   VENERA 6   3649   USSR   2 JAN 69     10016   VENERA 6   JAN 69     10016   VENERA 6   USSR   2 JAN 69     10016   VENERA 6   USSR	1		3768	USSR		HAR	•
119A   COSMOS 262   3629   USSR   26 DEC   10	- 1	- 1	3626	SA			•
LAUNGHES			3629	USSR	- 1	7 a	
00116         FERRERA         5 JAN         6 JAN 69           00116         VENERA         5 JAN         1 JAN 69           00116         USSR         10 JAN         17 MAY 69           0022         USSR         10 JAN         17 MAY 69           0024         USSR         10 JAN         13 JAN 69           0025         USSR         12 JAN         13 JAN 69           0026         USSR         12 JAN 13 JAN 69           0043         USSR         12 JAN 13 JAN 69           0044         USSR         12 JAN 13 JAN 69           0045         SGYUZ 4         3659         USSR         12 JAN 13 JAN 69           0046         SGYUZ 4         3659         USSR         15 JAN 19 JAN 69           0046         SGYUZ 4         3659         USSR         15 JAN 19 JAN 69           0046         SGYUZ 4         3659         USSR         15 JAN 19 JAN 69           0046         SGYUZ 5         3659         USSR         15 JAN 69           0056         SGYUZ 6         3659         USSR         15 JAN 69           0057         SGYUZ 9         3659         USSR         15 JAN 69           0058         SGYUZ 9         3659			2442	8530	NAD &	- 1	7
001B         3643         USSR         5 JAN         6 JAN         5 JAN         6			3642	#\$\$A		3	r
0024         VENERA DE JOAN         17 MAY 69           0024         VENERA DE JOAN         10 JAN         17 MAY 69           0024         USSR         10 JAN         13 JAN 69           0025         USSR         12 JAN         13 JAN 69           0024         USSR         12 JAN         13 JAN 69           0025         USSR         12 JAN         13 JAN 69           0026         USSR         14 JAN         17 JAN 69           0026         USSR         15 JAN         14 JAN 69           0026         USSR         15 JAN 11 JAN 69           0026         USSR         15 JAN 11 JAN 69           0026         USSR         15 JAN 11 JAN 69           0026         USSR         15 JAN 11 JAN 69           0026         USSR         15 JAN 11 JAN 69           0027         USSR         22 JAN 89           0028         USSR         22 JAN 89           0029         USSR         23 JAN 69           0029         USSR         23 JAN 69           0029         USSR         23 JAN 69           0029         USSR         23 JAN 7           0029         USSR         25 FEB 69           0			3643	USSK	- 1	\$ <b>\$</b>	
00-20 00-34         USSR 00-34         10 JAN         13 JAN         69 00-36           00-34 00-35         USSR 00-34         12 JAN         13 JAN         69 12 JAN         19 JAN         69 12 JAN         10 JAN         1		Į	3648	USSR		MAY	_
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0044         SOYUZ 4         3654         USSR         14 JAN         15 JAN         15 JAN         16 JAN         17 JAN         17 JAN         17 JAN         18 JAN         19 JAN         19 JAN         19 JAN         19 JAN         19 JAN         69           0056         0056         USSR         15 JAN         18 JAN         19 JAN         69           0056         0056         USSR         15 JAN         18 JAN         69           0056         0056         USSR         15 JAN         18 JAN         69           0056         0056         USSR         22 JAN         20 JAN         69           0078         0056         USSR         23 JAN         69           0078         0078         USSR         23 JAN         30 JAN         69           0078         0078         USSR         23 JAN         30 JAN         69           0078         0078         USSR         23 JAN         30 JAN         69           0104         USSR         0158         367         USSR         37 FEB         1 MAR         69           0124         CUSMUS 267         3763         USSR         25 FEB         4 MAR         69	- 1		3653	USSR	1	3	•
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00064         050 5         148         2 JAN         2 JAN         2 JAN         2 JAN         2 JAN         2 JAN         3 FEB           00064         0006	- 1		3657	USSR	ı	NAL	
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0074         US         22 JAN         26 JAN         26 JAN         26 JAN         26 JAN         26 JAN         26 JAN         26 JAN         26 JAN         26 JAN         26 JAN         26 JAN         26 JAN         30 JAN			3664	Sn	1	DEC /	
CUGNIS         CUSKINGS 264         23 JAN         36 JAN         36 JAN         30 JAN         3	ı		3666	Sn	ŀ	NY	
00.35     23 JAN     30 JAN       00.35     36.72     USSR     23 JAN     13 FEB       00.04     36.72     USSR     24 FEB     24 FEB       01.04     10.05     10.05     24 FEB     1 MAY       01.26     10.05     10.05     1 MAY       01.26     10.05     10.05     1 MAY       01.26     10.05     10.05     1 MAR       01.26     10.05     10.05     10.05       01.26     10.05     10.05     10.05       01.26     10.05     10.05     10.05       01.27     10.05     10.05     10.05       01.28     10.05     10.05     10.05       01.29     10.05     10.05     10.05       01.26     10.05     10.05     10.05       01.26     10.05     10.05     10.05       01.26     10.05     10.05     10.05       01.26     10.05     10.05     10.05       01.26     10.05     10.05     10.05       01.26     10.05     10.05     10.05       01.26     10.05     10.05     10.05       01.26     10.05     10.05     10.05       01.26     10.05     10.05     10.05			3667	USSR	•		
0034C     3671     USS     5 FEB     24 FEB       010A     3672     USSR     7 FEB     1 MAY       012A     CUSSR     7 FEB     17 MAR       012B     3676     USSR     7 FEB     17 MAR       015B     26 FEB     4 MAR       015B     3762     USSR     25 FEB     4 MAR       015B     3763     USSR     25 FEB     4 MAR       015A     USSR     26 FEB     6 MAR       017A     USSR     26 FEB     6 MAR	1		3668	USSR		N d	
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1974   1975		LM/DESCENT	3780	SO	- 1	- 1
Name		- 1	3773	USSR	- 1	
Color   Colo	- 1	J	3775	USSR	- 1	
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0238     3808     USSR     15 MAR     22       025A     6V1-17     3824     US     18 MAR     27       025B     0V1-17A     3828     US     18 MAR     27       025F     0V1-17A     3828     US     18 MAR     24       025F     0VS     18 MAR     24       025F     0VS     18 MAR     24       025A     3828     US     18 MAR     24       025B     0SMOS     273     3831     USSR     22 MAR     24       027B     0SSR     22 MAR     30     0SSR     22 MAR     30       028A     COSMOS     274     3833     USSR     24 MAR     20       029C     3849     USSR     24 MAR     20       029F     3852     USSR     26 MAR     5       029F     3852     USSR     26 MAR     5       029F     3852     USSR     26 MAR     13       029F <t< td=""><td></td><td>COSMOS 271</td><td>3007</td><td>455P</td><td>1 -</td><td>ı</td></t<>		COSMOS 271	3007	455P	1 -	ı
025B     0VI-18     3824     US     18 MAR     27       025B     0VI-17A     3826     US     18 MAR     27       025F     382B     US     18 MAR     26       025A     4121     US     18 MAR     16       026A     3829     US     19 MAR     6       027A     COSMOS 273     3831     USSR     21 MAR     26       027B     28A     COSMOS 274     3833     USSR     22 MAR     20       028B     COSMOS 274     3833     USSR     24 MAR     20       029C     3849     USSR     24 MAR     21       029C     3852     USSR     26 MAR     23       029F     3852     USSR     26 MAR     23       029B     3852     USSR     26 MAR     13       029B     38	i	084	3808	USSR		II A
0250         0V1-17A         3026         US         18 HAR         24           025F         3828         US         18 MAR         16           0256         4121         US         18 MAR         24           026A         3829         US         19 MAR         24           027A         COSMOS 273         3831         USSR         22 MAR         30           027B         USSR         22 MAR         20         22 MAR         20           028A         COSMOS 274         3833         USSR         24 MAR         29           029C         3849         USSR         24 MAR         29           029C         3852         USSR         26 MAR         5           029F         3852         USSR         26 MAR         13		81-1AD	3824	S O	- (	- 1
025F     3828     US     18 MAR     16       0256     121     US     18 MAR     6       026A     3829     US     19 MAR     24       027A     COSMOS 273     3831     USSR     22 MAR     30       027B     028A     COSMOS 274     3833     USSR     24 MAR     20       028B     028B     028B     USSR     24 MAR     21       029C     3849     USSR     24 MAR     29       029F     3852     USSR     26 MAR     5       029F     3852     USSR     26 MAR     13       029F     3852     USSR     26 MAR <td>- 1</td> <td>0V1-17A</td> <td>9826</td> <td></td> <td></td> <td>**</td>	- 1	0V1-17A	9826			**
026A     3829     US     19 MAR     24       026B     US     19 MAR     24       027A     COSMOS 273     3831     USSR     22 MAR     30       027B     USSR     22 MAR     30       028A     COSMOS 274     3833     USSR     24 MAR     1       029C     3849     USSR     24 MAR     29       029C     3849     USSR     26 MAR     5       029F     3852     USSR     26 MAR     1       029F     3852     USSR     26 MAR     1       029F     3853     USSR     26 MAR     1	1		3828	US		I A
0278     CDSMDS 273     3831     USSR     22 MAR     30       0278     CDSMDS 273     3831     USSR     22 MAR     30       0270     028A     COSMOS 274     3833     USSR     24 MAR     21       028B     COSMOS 274     3833     USSR     24 MAR     23       029C     3849     USSR     26 MAR     5       029C     3852     USSR     26 MAR     6       029F     3852     USSR     26 MAR     13       029H     3853     USSR     26 MAR     13       029H     3853     USSR     26 MAR     7       029H     3853     USSR     26 MAR     7			3829	Sn		- 1
0276         0276         3832         USSR         22 MAR         28           028A         COSMOS 274         3833         USSR         24 MAR         1           028B         USSR         24 MAR         29         24 MAR         29           029C         3849         USSR         26 MAR         5           029F         3852         USSR         26 MAR         13           029F         3852         USSR         26 MAR         13           029F         3853         USSR         26 MAR         13           029H         3853         USSR         26 MAR         7		27	3831	85511	- 1	
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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1969 LAUNCHES (	(CONT.)					
1969 629K		3860	USSR	26 MAR	26 DEC 71	
1969 029L		3862	USSR	I	DEC	
- 1		3863	USSR	- 1	¥5	
		3864	USSR	26 MAR	23 FEB 70	
1969 6290 1969 029K		3866	USSR		S	
5670 6961		3867	USSR	Ł		
		3868	USSR	26 MAK 26 MAB	4 FEB 70	
1969 0290		3870	USSR			
- 1		3871	USSR		33 MON 82	
		3877	USSR	26 MAK	ŀ	
1969 029¥		3880	USSR	l _	AUG	
- 1		3881	USSR			
		3882	USSR		19 NOV 77	
1969 029AB		3913	USSR	29 MAR		
		3917	USER		¥	
		3918	USSR	26 MAR	10 MAY 69	
		3023	WASH	26 MAR	AUG	
1969 U29AJ		3966	USSR	1	445	
		3967	USSR	26 MAR	26 JUN 69	
1969 029AM		9279	USSR			
- 1		9692	USSR	26 MAR	'Ţ	
031A	COSMUS 275	3846	USSR	28 MAR	7 FEB 70	
1969 032A CO	COSMOS 276	3854	USSR	4 APR		
1959 0328	COSMOS 277	3855	USSR	4 APR	3	
938		3857	MSSN	9 APR	17 APR 69	
1969 034A CI	CUSMUS 218	3884	USSR	- 1	APR 6	
035A	MOLNIYA 1-11	3885	USSR	11 APR	17 APR 74 1 MAY 69	
1969 0358		3886	USSR			
		3888	USSR	11 APR	23 ADD 69	
038A	CDSMUS 279	3893	USSK	15 APR	4	
1969 6388 1969 039A		3895	SN		APR	
4043	CBSMUS 280	3905	USSR	23 APR	26 APR 69	
	1000	3919	USSR	4	- 1	
1969 0400		3920	USSR	23 APR	8 MAY 69	
		3914	SN	2 MAY	FEB	
1969 0418		2062	311	- 1	10 MAY 69	

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1969 LAUNCHES	S (CONT.)					
	COSMOS 281	3939	USSR	13 MAY	21 HAY 69	
1969 043A	APOLLO 10	1405	USSR		*	•
- 1	- 1	3944	USSR	20 XXX	28 MAY 69	70
1969 044B		3945	USSR		YAM	
	COSMOS 283	3957	USSR	27 MAY	10 DEC 69	
1969 048A	CDSMOS 284	3971	USSR	27 HAY	6 JUN 69	
		3972	USSR		4	
1969 0494	CHSMOS 285	3003	UUUK	29 HAY		
ĺ		3985	USSR	NOF E	5 AUG 69	
	060 6	3986	S	NOF S	12 OCT 79	
	COSMUS 286	3988	USSR	15 JUN	23 JUN 69	
	EXPLORER 41	3990	ÙS	21 JUN	23 DEC 72	
	CO3103 201	3992	USSR	24 JUN	27 JUL 69	
1969 (0558	CUSMUS 200	3995	USSR	27 JUN	2 JUL 69	
1969 056A	CAPSULE	ANN	Sn	29 JUN 82	7 JUL 69	‡
		4022	Sn	29 JUN	13 JUL 69	
1969 0578	CUSMUS 209	4034	USSR	10 JUL 10 JUL		
1969 058A	LUNA 15	4036 4037	USSR		┋╉	*
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1969 059A	APOLLO 11	4039	SO	•	•	A J
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		4040	USSR	- 1	10 JUN 71	
1969 061F		5288 5288	USSR	22 JUL	15 JUN 71	
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1969 U63A		4050	S	24 JUL	23 AUG 69	ķ
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1969 064F		4057	SO	26 JUL	22 OCT 69	
1969 0646		4059 4060	50	26 JUL	3 4	
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1969   LAUNCHES (CONT.)   4086   US   26 JUL   18 FEB 70     1969   US   1964   US   26 JUL   21 HIV 99     1969   US   1964   US   26 JUL   21 HIV 99     1969   US   26 JUL   21 HIV 99     1969   US   26 JUL   21 HIV 99     1969   US   26 JUL   21 HIV 99     1969   US   26 JUL   21 HIV 99     1969   US   26 JUL   21 HIV 99     1969   US   26 JUL   21 HIV 99     1969   US   26 JUL   21 HIV 99     1969   US   26 JUL   21 HIV 99     1969   US   26 JUL   21 HIV 99     1969   US   26 JUL   21 HIV 99     1969   US   26 JUL   21 HIV 99     1969   US   26 JUL   21 HIV 99     1969   US   26 JUL   21 HIV 99     1969   US   26 JUL   21 HIV 99     1969   US   26 JUL   21 HIV 99     1969   US   26 JUL   21 HIV 99     1969   US   26 JUL   21 HIV 99     1969   US   26 JUL   21 HIV 99     1969   US   27 HIV 99     1969   US	DESIGNATION	NAME	CATAL DC NUMBER	SOURCE	LAUNCH	DECAY	NOTES
664K         608F         US         25 JUL         10 JUL         10 JUL         21 JUL		(CUNT					
06644	1		4086	Sn	1	FEB	
06444         4000         US         26 JUL         24 JUL	1		4088	Sn	1	Ş	
0664P	- 1		4089	<u>\$</u> n	- [	<b>₹</b>	
CONTRACT         CONTRACT			4090	0.5		OCT NOV	
100   105   101   105   101   105   101			6604	Sn		NAD	
CORNIGO         CORNIGO <t< td=""><td>1 .</td><td></td><td>4101</td><td>SII</td><td>ſ '</td><td>S C</td><td></td></t<>	1 .		4101	SII	ſ '	S C	
0644         (109)         US         26 JUL         4 SP           0644         5473         US         26 JUL         5 JUL	- 1		4108	SP.	· [	*	
06471         05471         US         26 JUL         5 JUL         5 JUL         5 JUL         5 JUL         5 JUL         5 JUL         5 JUL         6			4109	Sn:	•	SEP	
USE         USE         1 JUL         1 J	1		5473	SD SD	Γ.	NAL	
ODE ADDRESS         COSMOS 291         4056         USSR         6 AUG         8 SEP           0678         LOSSA         USSR         7 AUG         11 AUG           0672         LOSSA         USSR         7 AUG         11 AUG           0672         LOSSA         TAME         11 AUG         12 AUG           0684         DSD         COSMUS 293         4072         USSR         7 AUG         12 AUG           0714         COSMUS 294         4074         USSR         19 AUG         23 AUG           0715         COSMUS 294         4074         USSR         19 AUG         21 AUG           0714         COSMUS 295         4074         USSR         19 AUG         21 AUG           0734         COSMUS 295         4074         USSR         22 AUG         10 BC           0734         COSMUS 295         4076         USSR         22 AUG         10 BC           0734         COSMUS 295         4076         USSR         22 AUG         10 BC           0744         COSMUS 295         4076         USSR         22 AUG         10 BC           0745         COSMUS 296         4089         USSR         23 AUG         10 BC			4054	30	ſ	3	
UGARD         CUSSIN         7 AUG         114 AUG           C670         UGSR         7 AUG         114 AUG           C671         4064         USSR         7 AUG         12 AUG           C671         4064         USSR         7 AUG         12 AUG           C688         DSO 6         4065         USSR         7 AUG         12 AUG           C688         DSO 6         4072         USSR         10 AUG         20 AUG           071A         CDSHUS 294         4074         USSR         19 AUG         27 AUG           072A         CDSHUS 295         4074         USSR         22 AUG         10 BG           073A         CDSHUS 295         4074         USSR         22 AUG         11 DE           073A         CDSHUS 295         4076         USSR         22 AUG         11 DE           073A         CDSHUS 295         4076         USSR         22 AUG         11 DE           073A         CDSHUS 296         4076         USSR         22 AUG         15 EP           073A         CDSHUS 297         4089         USSR         25 AUG         15 EP           073B         CDSHUS 298         4099         USSR         15 EP <td></td> <td></td> <td>4058</td> <td>USSR</td> <td>-</td> <td>SEP</td> <td></td>			4058	USSR	-	SEP	
CORREST         CORREST         TANG         10 AUG           CORREST         CORREST         TANG         12 AUG           CORREST         COSHOUS         29 AUG         7 AUG         12 AUG           CORREST         COSHOUS         29 AUG         7 AUG         12 AUG           CORREST         COSHOUS         29 AUG         7 AUG         20 AUG           COTAB         FORT         USSR         16 AUG         20 AUG           COTAB         COSHOUS         294         4072         USSR         16 AUG         20 AUG           COTAB         COSHOUS         294         4074         USSR         22 AUG         17 BE           COTAB         COSHOUS         294         4076         USSR         22 AUG         17 BE           COTAB         COSHOUS         294         4076         USSR         22 AUG         18 BE           OTAB         COSHOUS         294         4076         USSR         23 AUG         18 BE           OTAB         COSHOUS         294         4081         USSR         29 AUG         18 BE           OTAB         COSHOUS         294         4082         USSR         28 BE         18 SE	1		4062	USSR	7 AUG	AUG 6	
CORDING         4064         USSR         7 AUG         12 AUG           CORDING         4065         USSR         7 AUG         17 AUG           CORDING         4065         USSR         16 AUG         28 AUG           CORDING         4072         USSR         16 AUG         28 AUG           O714         COSMUS         294         4074         20 AUG           0718         COSMUS         294         4074         USSR         19 AUG         27 AUG           0718         COSMUS         294         4077         USSR         22 AUG         27 AUG           0734         COSMUS         294         4076         USSR         22 AUG         27 AUG           0774         CUSMUS         294         4076         USSR         22 AUG         1 DEC           0774         CUSMUS         294         4076         USSR         22 AUG         1 DEC           0774         CUSMUS         294         4078         USSR         23 AUG         5 EP         1 DEC           0774         CUSMUS         294         4078         USSR         25 AUG         5 EP         1 DEC           0776         CUSMUS         294	- 1		4063	USSR		974	
CASEA         DSG 6         4065         US         9 AUG         7 HAR           CASHUS 293         4066         USSR         16 AUG         28 AUG           0713         CUSHUS 293         4072         USSR         16 AUG         28 AUG           0724         CUSHUS 294         4074         USSR         22 AUG         27 AUG           0734         CUSHUS 295         4074         USSR         22 AUG         1 DEC           0738         CUSHUS 296         4077         USSR         22 AUG         1 DEC           0738         CUSHUS 296         4078         USSR         22 AUG         1 DEC           0758         CUSHUS 296         4081         USSR         2 SEP         1 SEP           0758         CUSHUS 297         4081         USSR         2 SEP         1 SEP           0774         CUSHUS 298         4083         USSR         2 SEP         1 SEP           0774         CUSHUS 298         4083         USSR         2 SEP         1 SEP           0774         CUSHUS 298         4083         USSR         1 SEP         1 SEP           0770         USSR         USSR         1 SEP         1 SEP           077			4064	USSR		AUG	
C688L         PACE 1         FACE 1         FACE 28 AND COSMUS 293         4072         USSR 15 AND COSMUS 294         4072         USSR 15 AND COSMUS 294         4074         USSR 15 AND COSMUS 294         4074         USSR 19 AND COSMUS 295         27 AND COSMUS 295         4076         USSR 22 AND COSMUS 297         10 AND COSMUS 297	1		4065	SN		MAR	
0711 A         COSMIDS         293 AUG         28 AUG         28 AUG         20 AUG           0718 C         COSMIDS         294 AUG         4074 B         USSR         19 AUG         27 AUG         27 AUG         27 AUG         27 AUG         27 AUG         27 AUG         27 AUG         27 AUG         27 AUG         27 AUG         27 AUG         10 EC         27 AUG		+	4066	3n	1	APR	
0724         COSMUS 294         4074         USSR         19 AUG         27 AUG           0726         4075         4075         USSR         22 AUG         1 DEC           0734         COSMUS 295         4076         USSR         22 AUG         1 DEC           0744         4078         USSR         22 AUG         1 DEC           0744         4078         USSR         23 AUG         1 DEC           0744         4078         USSR         23 AUG         1 DEC           0746         4080         USSR         29 AUG         5 EP           0746         4080         USSR         29 AUG         5 EP           0746         4080         USSR         29 AUG         5 EP           0776         4083         USSR         2 SEP         11 SEP           0774         4083         USSR         2 SEP         15 SEP           0770         4093         USSR         15 SEP         16 SEP           0770         4094         4095         USSR         15 SEP         16 SEP           0784         4095         USSR         2 SEP         16 SEP           0794         4095         USSR         2 SEP <td>_</td> <td></td> <td>4072</td> <td>USSR</td> <td></td> <td>V V</td> <td></td>	_		4072	USSR		V V	
0728         COSMUS 295         4076         USSR         22 AUG         1 DEC           0734         4078         USSR         23 AUG         1 DEC           0744         4078         USSR         23 AUG         7 SEP           0754         4078         USSR         23 AUG         7 SEP           0754         4078         USSR         29 AUG         5 SEP           0756         4081         USSR         2 SEP         10 SEP           0776         4083         USSR         2 SEP         11 SEP           0776         4083         USSR         2 SEP         11 SEP           0776         4083         USSR         2 SEP         11 SEP           0777         4094         USSR         15 SEP         16 SEP           0770         4094         USSR         15 SEP         16 SEP           0770         4095         USSR         15 SEP         16 SEP           0770         4096         USSR         18 SEP         22 SEP         16 SEP           0770         4097         USSR         22 SEP         16 SEP         16 SEP           0794         4104         4104         USSR         22 SEP			404	USSR		AUG	
073A         CUSMUS 296         4078         USSR         22 AUG         7 SEP           074A         4078         USSR         23 AUG         7 SEP           075A         CUSMUS 296         4083         USSR         29 AUG         5 SEP           076A         CUSMUS 298         4083         USSR         2 SEP         11 SEP           077A         CUSMUS 298         4093         USSR         2 SEP         11 SEP           077C         4094         USSR         15 SEP         16 SEP           077C         4094         USSR         15 SEP         16 SEP           077C         4099         USSR         15 SEP         16 SEP           077C         USSR         15 SEP         16 SEP           077D         USSR         15 SEP         16 SEP           077D         USSR         15 SEP         16 SEP           078A         USSR         18 SEP         22 SEP         16 SEP           079B         4102         USSR         23 SEP         27 SEP           079B         4102         USSR         23 SEP         27 SEP           080B         41004         USSR         24 SEP         27 SEP      <			4075	1350 1350	ı	200	
074A         USS         23 AUG         7 SEP           075A         4078         USSR         29 AUG         5 SEP           075B         4081         USSR         29 AUG         5 SEP           075B         4082         USSR         2 SEP         10 SEP           075B         4082         USSR         2 SEP         11 SEP           077A         USSR         15 SEP         15 SEP         15 SEP           077B         USSR         15 SEP         16 SEP         16 SEP           077C         USSR         15 SEP         16 SEP         16 SEP           077D         USSR         15 SEP         16 SEP         16 SEP           077D         USSR         10 SEP         16 SEP         16 SEP           077D         USSR         16 SEP         16 SEP         16 SEP           077D         USSR         16 SEP         16 SEP         16 SEP           077D         USSR         16 SEP         16 SEP         16 SEP           077B         USSR         16 SEP         16 SEP         17 SEP           077B         USSR         16 SEP         17 SEP         17 SEP           077B         USSR	- 1	- 1	4016	7550 93311	ı	1	
075A         CUSKUS 294         4081         USSR         29 AUG         5 SEP           075B         CUSKUS 297         4083         USSR         2 SEP         11 SEP           077A         CUSKUS 298         4093         USSR         15 SEP         16 SEP           077C         4094         USSR         15 SEP         16 SEP           077C         USSR         18 SEP         22 SEP           077B         USSR         18 SEP         22 SEP           079A         USSR         18 SEP         24 SEP           079B         USSR         22 SEP         16 MAY           080A         USSR         22 SEP         16 MAY           080B         4104         USSR         23 SEP         27 SEP           081B         4104         USSR         24 SEP         27 SEP           081B         4104         USSR         24 SEP         27 SEP           082A         4104         USSR         24 SEP         27 SEP			4078	S		•	
076A         CUSMUS 297         4083         USSR         2 SEP         11 SEP           077A         CUSMUS 298         4093         USSR         15 SEP         16 SEP         17 SEP         17 SEP         17 SEP         17 SEP         17 SEP         17 SEP         17 SEP         17 SEP         17 SEP	1	CUSMUS 296	4081	USSR	ſ	SEP 6	
UTOB         USSR         2 SEP         11 SEP           0774         CUSKNUS 298         4093         USSR         15 SEP         15 SEP         15 SEP         15 SEP         15 SEP         16 SEP         17 SEP         17 SEP         17 SEP         17 SEP         17 SEP         17 SEP         17 SEP         17 SEP         17 SEP         17 SEP         17 SEP         17 SEP         17 SEP         17 SEP         17 SEP         17 SEP	- 1	CUSMUS 297	4082	USSR	- 1	85	
UTTB         USSR         15 SEP         16 SEP           0770         USSR         18 SEP         16 SEP           0770         USSR         18 SEP         22 SEP           0794         USSR         22 SEP         16 MAY           0794         USSR         22 SEP         16 MAY           0794         USSR         22 SEP         16 MAY           0804         USSR         23 SEP         17 SEP           0804         USSR         23 SEP         27 SEP           0804         USSR         23 SEP         27 SEP           0804         USSR         24 SEP         27 SEP           081A         USSR         24 SEP         27 SEP           081B         4105         USSR         24 SEP         29 SEP           082A         4110         USSR         24 SEP         29 SEP           082A         4147         USS         30 SEP         30 SEP           082B         4147         USS         30 SEP			4083	USSR		SEP	
077C         USSR         15 SEP         16 SEP           077D         USSR         15 SEP         16 SEP           077D         USSR         15 SEP         16 SEP           077B         USSR         18 SEP         22 SEP           079B         USSR         18 SEP         24 SEP           079B         USSR         22 SEP         24 SEP           079B         USSR         22 SEP         16 MAY           080B         USSR         22 SEP         16 MAY           080B         4104         USSR         23 SEP         27 SEP           081A         CUSMUS 301         4104         USSR         24 SEP         27 SEP           081A         USSR         24 SEP         27 SEP         27 SEP           081A         4106         USSR         24 SEP         27 SEP           081A         4107         USSR         24 SEP         29 SEP           082A         4111         USSR         29 SEP         29 SEP           082A         4147         USSR         30 SEP         30 SEP           082B         4147         USSR         30 SEP         16 DCT	1	ľ	4093	USSR		SEP	
0770         4095         USSR         15 SEP         16 SEP         16 SEP         16 SEP         16 SEP         16 SEP         16 SEP         16 SEP         16 SEP         16 SEP         22 SEP         24 SEP         24 SEP         24 SEP         24 SEP         24 SEP         24 SEP         24 SEP         24 SEP         24 SEP         24 SEP         24 SEP         24 SEP         27 SEP         16 MAY           0804         CUSMUS 300         4104         USSR         23 SEP         27 SEP         29 SEP         29 SEP         29 SEP         29 SEP         29 SEP         29 SEP         29 SEP         29 SEP         29 SEP         29 SEP         30 SEP         30 SEP         30 SEP         30 SEP         30 SEP	- 1		4604	USSR	- 1	4	
UTBA         CUSMOS 299         4097         USSR         18 SEP         22 SEP         24 SEP           0788         4102         USSR         22 SEP         12 OCT           0798         USSR         22 SEP         12 OCT           0798         USSR         23 SEP         14 NAY           0808         USSR         23 SEP         27 SEP           081A         USSR         24 SEP         27 SEP           081B         4106         USSR         24 SEP         27 SEP           081B         4106         USSR         24 SEP         29 SEP           082R         4107         USSR         24 SEP         29 SEP           082R         4107         USSR         24 SEP         29 SEP           082R         4107         USSR         24 SEP         29 SEP           082R         4111         US         30 SEP         30 UST           082R         4147         US         30 SEP         16 DCT			4095	USSR		SEP B B	
078B         USSR         18 SEP         24 SEP           079A         4102         US         22 SEP         12 OCT           079B         080A         USSR         23 SEP         27 SEP           080B         4104         USSR         23 SEP         27 SEP           081A         USSR         24 SEP         27 SEP         27 SEP           081B         4105         USSR         24 SEP         2 OCT           082B         4107         USSR         24 SEP         29 SEP           082A         4111         USSR         24 SEP         29 SEP           082L         4147         USSR         30 SEP         30 OCT           082L         4147         US         30 SEP         30 SEP         16 OCT	1 _	S 29	4097	USSR	l	SEP	
679A         4102         US         22 SEP         12 UL           079B         079B         22 SEP         16 MAY           080A         CUSMUS 300         4104         USSR         23 SEP         27 SEP           081A         CUSMUS 301         4105         USSR         24 SEP         27 SEP           081B         4107         USSR         24 SEP         27 SEP         27 SEP           081B         4107         USSR         24 SEP         29 SEP         29 SEP           082A         4111         USSR         30 SEP         30 OCT           082L         4147         USSR         30 SEP         30 OCT	-		4098	NSSU	1	2	
080A         CUSMUS 300         4104         USSR         23 SEP         27 SEP           080B         4105         USSR         24 SEP         27 SEP           081A         CUSMUS 301         4105         USSR         24 SEP         2 0CT           081B         4107         USSR         24 SEP         29 SEP           082A         4111         US         30 SEP         3 0 GCT           082L         4142         US         30 SEP         3 0 NOV           082L         4147         US         30 SEP         16 DCT			4102	SD ST	- 1	<b>X</b>	
0808         USSR         24 SEP         2 GCT           081A         CDSMUS 301         4104         USSR         24 SEP         29 SEP           081B         USSR         24 SEP         29 SEP         29 SEP         29 SEP           082A         4111         US         30 SEP         3 0 GCF           082L         4142         US         30 SEP         3 0 GCF           4147         US         30 SEP         16 DCT			4104	USSR		SEP	
USSA         24 SEP         29 SEP         29 SEP         29 SEP         29 SEP         29 SEP         30 GCT           US         30 SEP         30 SEP         30 SEP         3 NOV           US         30 SEP         3 NOV         3 SEP         3 NOV           US         30 SEP         16 DCT         16 DCT	1	1	4106	USSR	ł	130	
062A 4111 US 30 SEP 30 UCT 082L US 30 SEP 30 UCT 082L US 30 SEP 30 UCT 082L US 30 SEP 16 UCT US 30 SEP 16 UCT	- 1		4107	USSR	- 1	4	
1828 US 30 SEP 16 OCT			4111	Sn			
	1		4147	Sn		DCT	

1909   LAUNCHES (CONT.)   1153   US   20 SEP   14 APR 11	NATIONAL	NAME	CATALOG			) I
WASAN   1153   US   30 SEP   14 APR   1024   1153   US   30 SEP   14 APR   1024   1153   US   30 SEP   14 APR   1024   1153   US   30 SEP   12 APR   1024   1153   US   30 SEP   12 APR   1024   12 APR	٧	(T.)				
MORENT         1100         NEW YORK         1100         US SEED         1 MAY           MORENT         1170         US SEED<			4153	Sn	0	A APR 7
ORDAND         176         ORDAND           ORDAND         176         US         30 SEP         13 MAY           ORDAND         176         US         30 SEP         13 MAY           ORDAND         176         US         30 SEP         13 MAY           ORDAND         177         US         30 SEP         15 MAY           ORDAND         177         US         30 SEP         15 MAY           ORDAND         177         US         30 SEP         15 MAY           ORDAND         177         US         30 SEP         17 MAY           ORDAND         177         US         30 SEP         17 MAY           ORDAND         177         US         30 SEP         17 MAY           ORDAND         177         US         30 SEP         17 MAY           ORDAND         177         US         30 SEP         17 MAY           ORDAND         177         US         30 SEP         17 MAY           ORDAND         177         US         30 SEP         17 MAY           ORDAND         177         US         30 SEP         17 MAY           ORDAND         177         17 MAY         17 MAY			4163	US US	- 1	JAN
Name			4179	SO		2
Nazer   Naze			4189	SO		DEC.
No.2264   1.170   1.			4194	Sn		2
Headen   H	1969 0828L		4197	Sn		AP.
Color   Colo	- 1		4190			<b>*</b>
Name	1		4202	59		₹ ?
Name			4203	S	S	N N
Objects         4229         US         30 SEP         10 DRA           Objects         4229         US         30 SEP         10 DRC           Objects         4239         US         30 SEP         30 DRC           Objects         4240         US         30 SEP         13 MBV           Objects         4241         US         30 SEP         21 MBV           Objects         4241         US         30 SEP         21 MBV           Objects         4241         US         30 SEP         21 MBV           Objects         4241         US         30 SEP         21 MBV           Objects         4243         US         30 SEP         21 MBV           Objects         4243         US         30 SEP         21 MBV           Objects         4333         US         30 SEP         12 MBV           Objects         4343         US         30 SEP         12 MBV           Objects			4213	S	1	APR
USCO   1233   US   30 SEP   30 NOW			4229	ÙS		DEC
082CS 420 US 30 SEP 21 MAY 1820 US 30 SEP 21 MAY 1820 US 30 SEP 21 MAY 1820 US 30 SEP 21 MAY 1820 US 30 SEP 21 MAY 1820 US 30 SEP 21 MAY 1820 US 30 SEP 21 MAY 1820 US 30 SEP 21 MAY 1820 US 30 SEP 21 MAY 1820 US 30 SEP 21 MAY 1820 US 30 SEP 22 MAX 1820 US 30 SEP 23 MAY 1820 US 30 SEP 23 MAY 1820 US 30 SEP 23 MAY 1820 US 30 SEP 23 MAY 1820 US 30 SEP 23 MAY 1820 US 30 SEP 24 MAY 1820 US 30 SEP 25 MAY 1820 US 30 SEP 26 MAY 1820 US 30 SEP 30 MAY 1820 US 30 SEP 30 MAY 1820 US 30 SEP 30 MAY 1820 US 30 SEP 30 MAY 1820 US 30 SEP 30 MAY 1820 US 30 SEP 30 MAY 1820 US 30 SEP 30 MAY 1820 US 30 SEP 30 MAY 1820 US 30 SEP 30 MAY 1820 US 30 SEP 30 MAY 1820 US 30 SEP 30			4238	US		DEC.
CASCU   AZAA   US 30 SEP 11 JUN   CASCU   AZAA   US 30 SEP 11 JUN   CASCU   AZAA   US 30 SEP 21 NOW   CASCU   AZAA   US 30 SEP 21 NOW   CASCU   CASC			4240	S		YAH
NOZECA   NOZECCA		4244	SO		Š	
DAZDIF   AZ69   US   30 SEP   Z9 MAR			4113	S	1	000
NORZON   N			4269	S		HAR
OBZUN   AZBB   US 30 SEP 12 SEP   12 SEP   12 SEP   12 SEP   12 SEP   12 SEP   12 SEP   12 SEP   12 SEP   13 SEP   13 SEP   13 SEP   14 SEP   15 SEP   15 SEP   15 SEP   16			4271	S	- 1	FEB
OBZENT   O			4288 4288	S		SE S
OB2DN	- 1		4310	Sn	- 1	N N
082EA 4335 US 30 SEP 7 MAY 082EC 4337 US 30 SEP 19 APR 082EC 4433 US 30 SEP 22 JUN 082EC 443 US 30 SEP 22 JUN 082EC 443 US 30 SEP 28 JUL 082EC 4450 US 30 SEP 28 JUL 082EC 4450 US 30 SEP 28 JUL 082EC 4450 US 30 SEP 28 JUL 082EC 4450 US 30 SEP 28 JUL 082EC 4450 US 30 SEP 28 JUL 082EC 4450 US 30 SEP 28 JUL 082EC 4450 US 30 SEP 28 JUL 082EC 4450 US 30 SEP 28 JUL 082EC 4450 US 30 SEP 28 JUL 082EC 4450 US 30 SEP 28 JUL 082EC 4450 US 30 SEP 28 JUL	- 1		4319		- 1	
082EC 4335 US 30 SEP 7 MAY 082EC 4359 US 30 SEP 19 APR 082EC 4433 US 30 SEP 19 APR 082EL US 30 SEP 22 JUN 082EL US 30 SEP 22 JUN 082EL US 30 SEP 28 JUL 082EV 4450 US 30 SEP 28 JUL 082EV 4450 US 30 SEP 28 JUL 082EV 4450 US 30 SEP 28 JUL 082EV 4450 US 30 SEP 28 JUL 082EV 4450 US 30 SEP 26 JUL 082EV 4450 US 30 SEP 26 JUL 082EV 4450 US 30 SEP 26 JUL 082EV 4450 US 30 SEP 26 JUL 082EV 4450 US 30 SEP 26 JUL	1		4323	US	1	FEB
082EE 4433 US 30 SEP 19 APR 082EF 4437 US 30 SEP 22 JUN 082EF 4437 US 30 SEP 28 JUL 082EQ 4450 US 30 SEP 28 JUL 082EV 4450 US 30 SEP 28 JUL 082EV 4450 US 30 SEP 28 JUL 082EV 4450 US 30 SEP 26 JUL 082EV 4450 US 30 SEP 26 JUL 082EV 4450 US 30 SEP 26 JUL 082EV 4450 US 30 SEP 26 JUL 082EV 4450 US 30 SEP 26 JUL 082EV 4450 US 30 SEP 26 JUL 082EV 4450 US 30 SEP 26 JUL 082EV 4450 US 30 SEP 26 JUL 082EV 4450 US 30 SEP 26 JUL 082EV 4450 US 30 SEP 26 JUL			1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SSS		YA.
082EF     4434     US     30 SEP     5 JAN       082EL     4437     US     30 SEP     22 JUN       082EL     4443     US     30 SEP     28 JUL       082EV     4450     US     30 SEP     16 SEP       082EZ     4454     US     30 SEP     25 OCT       082EZ     4454     US     30 SEP     25 OCT			4433	Sn		APR
082EU 4437 US 30 SEP 22 JUN 082EU 4443 US 30 SEP 28 JUL 082EV 4450 US 30 SEP 16 SEP 082EZ 4450 US 30 SEP 18 DEC 082EZ 4450 US 30 SEP 25 OCT	- 1		+6++	98		4
082EQ 4443 US 30 SEP 28 JUL 082ET 4446 US 30 SEP 16 SEP 16 SEP 082EZ 4450 US 30 SEP 18 DEC 082EZ 4454 US 30 SEP 25 BET 16 SEP 25 BET 16 SEP 25 BET 16 SEP 25 BET 17 SEP 25 BET 18 DEC 082EZ 4454 US 30 SEP 25 BET 18 DEC 082EZ 4454 US 30 SEP 25 BET 18 DEC 082EZ 4454 US 30 SEP 25 BET 18 DEC 082EZ 4454 US 30 SEP 25 BET 18 DEC 082EZ 4454 US 30 SEP 25 BET 18 DEC 082EZ 4454 US 30 SEP 25 BET 18 DEC 082EZ 4454 US 30 SEP 25 BET 18 DEC 082EZ 4454 US 30 SEP 26 BET 18 DEC 082EZ 4454 US 30 SEP 26 BET 18 DEC 082EZ 4454 US 30 SEP 25 BET 18 DEC 082EZ 445			4437	S		Z Z
082ET 4440 US 30 SEP 16 SEP 082EZ 4450 US 30 SEP 25 OCT 25			4443	S		ב ב
082EZ			4450	SO		2
	1969 082EZ			95		4

NAT LONAL						
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1969 LAUNCHES (C	(CONT.)					
i		4461	Sn	30 SEP	13 JUN 74	
1969 CB2FF		4463	SII	30 SEP	=	
- 1		4464	ŝñ	- 1	2 APR 81	
		6944	Sn		AON.	
1969 682FP		4470	<b>SD</b>	30 SEP	21 Jul 80	
- 1		4473	50	- 1		
		<b>5255</b>	Sn Sn		S	
- 1		4520	30			
		4521	S	30 SEP	18 OCT 80	
1969 0826D		4532	Sn	ı	MAR	
- 1		4533	311	1	1	
_		4535	SO.		S	
- 1		4540		- 1		
		4541	Sn:	30 SEP		
ł		4542	40			
		\$ \$ \$	\$0.5	30 SEP	22 JUL 80	
1040 0620		4540	) i	ŀ		
		4550	311	- 1	ı	
		4551	SO		001	
1969 0326W		4876			4	
		4887	Sn	30 SEP	16 JUL 78	
1		4889	33		Ι.	
		1684	SO	30 SEP	1 JAN 12	
		7600	311	1	١.	
1969 062HC		4073	50	20 SEP	8	
1969 UB2HG		4064	Sn	30 SEP	17 SEP 81	
- 1		4939	30	- 1	4	
_		5158	SN		AUG	
1969 082HN			37	ł		
_		5195	S :	30 SEP	15 JUN 81	
		97,40	AP	20 00	4 000 72	
		1/76	\$ 95 50 50 50 50 50 50 50 50 50 50 50 50 50			
		6769	311	•	CED	
		5,502	110	30 SEP		
1969 C82HX		5459	SN	30 SEP	SEP	
		55.21	SI	- 1	27 JUL 79	
		5522	Sn		DEC	
- 1		5593	30	Ł	¥	
		5634	Sn:		13 APR 81	
1969 68236		5636	<del>S</del> A	1		
		5750	SD:	30 SEP	23 JAN 77	
1969 USZJK			\$1.		2 0	

	\ 	12 NOV	USSR	4235		1969 0980
	26 NOV 69		USSR	4234		
ł		12 NOV	USSR	4224		988
1		ı	11550	4203	Democ	,
	ב ב ב		FRG	4261		_
ī	¥6.	1	TR6	4243		1
,	טכנ	a NOV	TI G	4242		1969 0970
			USSR	4219	COSMOS 308	096A
1	4			4136		1
	20 JUL 70		USSR	4185		0948
1	1	24 OCT	USSR	4183	TOCKOC 303	
,	1		USSR	4102	COSMOS 306	0934
	24 OCT 69	22 OCT	USSR	4151		0928
•	DEC	ł	USSR	4137	FRANCE 305	8060 696T
i	4	4	W 5 5 8	4136	COSMOS 303	0904
	•		USSR	4131		0898
ı	TO DEC 69	1.00	COUX	41.29	CDSM05 302	1969 089A C
1	\$	4	035K	0714	INTERCOSMOS I	0004
	CT	-	USSR	4127		0878
1	14 UCT 69	12 001	USSR	4126 C216	9 ZUYBS	1969 087A S
1		3 #	US58	4124	50702 7	0867
	CT		USSR	<b>4123</b>		0858
•	<b>4</b> 9	11 067	WS-SA	41.00	50X05 6 50X05	1085A
,	001	1 001	ŮŠ	411.8		
•	3 NOV 69	1 007	S	4117		1969 0836
•	104	1-964	E SRB		ESR0-18	0834
,	APR	30 SEP	S	9980		082KL
•	JUL		US	5821	A STATE OF THE STA	1969 UBZKJ
•	#	- 1		6178		
	DEC		SS	6044		
-	LY TAR TO	30 SEF	45	5964		1969 00280
•			3.0	5063 E800		- 1
	CT		US	5868		
	9 APX 72	30 SEP	65	5859		1969 0824
•		- 1	65	5633		
		30 SEP	S	5792		ĺ
•	4	ዋ		1645		1969 00241
•	26 OCT 74	30 SEP	υs	5756		1969 08234
					(CONT.)	1969 LAUNCHES
	DĘCAY	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION
				C4741 C6		

NATIONAL DESIGNATION	NAME	CATALOC	SOURCE	LAUNCH	DECAY	NOTES
1969 LAUNCHES	ES (CONT.)	andem errorm med marrorm vol.				
ì	2	4246	Sn	14 NOV	AON	*HY
1969 1008 1969 1008		4233	USSR	15 NOV	Ž	
	CUSM05 311	4252	USSR	4.	- 1	
1969 1028	212	4253	USSR	24 NDV 2 DEC	A A	
l	CTC coucos	42.5	USSR	3 DEC		
1969 106A	COSMOS 314	4266	USSR	ı	MAR	
- 1	1	4267	HSSR GSSE	11 DEC	27 JAN 70	
1969 137A	CUSMUS 315	4213 4374	U558	20 DEC 20 DEC	APR	
		4275	USSR		APR	
1969 107E		4287	USSR		Š	
	716 30M300	4294	USSR	20 050	28 ALIC 70	
1969 108A	016 CUMCUO	4282	USSB USSB	23 050	3	
		45.64	USSR			
1969 1098 1969 1098	CUSMUS DE	4281	USSR	1	28 DEC 69	
- 1		4290	USSR	- 1	4	
1969 1090	INTEDCHENCE 2	4291 4295	USSR	23 DEC 25 DEC	2 JAN 70	
l	3. 6006090344	4286	USSR		•	
1970 LAUNCHES	ES					
l	COSMOS 318	4292	USSR	O O	21 JAN 70	
1970 0018 1970 002A		1296	US	J -	FEB	
1970 0044	COSMOS 219	4200	8550	15 JAN	1 MAY 70	
	026 SUMS 03	4301	USSR		- 1	
		4302	USSR	-		
1970 0056 1970 0050		4304	USSR	16 JAN	FEB	
		4305	USSR	1	2 MAR 70	
		4306	355U	16 141	1	
1970 C36A	COSMOS 321	8064	USSR		HAR	
1970 0068		4309	USSR	20 JAN	X X Y	
- 1		4314	USSR	- 1	*	
	COSMDS 322	4315	USSR	21 JAN	29 JAN 70	
1970 0078	COSMOS 323	4328	USSR		FEB	
- 1		4329	USSR	10 FEB		
		7667	0000	ם מונים	30 CED 75	

1770   CLISC   CLISHOS 224   CLISHOS 224   CLISHOS 225	DESIGNATION 1970 LAUNCHES	NAME	NUMBER	SOURCE	LAUNCH
O   1   1   1   1   1   1   1   1   1		(CONT.			
0114 CUSHUS 324 4338 USSR 27 1910 USS 27 1910 USSR 27 191		- 1	4334	USSR	1 1
0.113A CDSHUS 325 4340 USSR 436 0110A 1010A 1010A 1345 USSR 437 USSR 436 0117A DIAL-HIKA 4344 FAC 105 1010A 1345 USSR 134 FAC 105 1010A 1346 USSR 134 USSR 1	014A	1 .	4338 4339	USSR	
0 016A	015A	111	4340	USSR	
017A DIAL-HIKA 1344 FRG 10 014B COSHOS 326 1345 FRANCE 10 014B COSHOS 326 1346 USSR 13 014B HETEDR 137 USSR 13 020B COSHOS 327 1359 USSR 17 020B COSHOS 320 1359 USSR 17 022B COSHOS 320 1356 USSR 18 022B COSHOS 320 1356 USSR 18 022B COSHOS 320 1356 USSR 18 022B COSHOS 320 1356 USSR 27 022B COSHOS 320 1356 USSR 27 022B COSHOS 320 1356 USSR 27 022B COSHOS 320 1356 USSR 27 022B COSHOS 320 1356 USSR 27 022B COSHOS 320 1356 USSR 27 022B COSHOS 320 1356 USSR 27 022B USSR 37 0			4342	S US	+ MAR
OLIAN   COSHOS 326   1315   FRANCE   1316   OLISK   1317   OLISK	017A	DIAL-WIKA	4344	FRG	
OLIVA   HETEOR   1347   USSR   137   OLIVA   1360   USSR   137   OLIVA   1360   USSR   137   OLIVA   1360   USSR   137   OLIVA   USSR   137   OLIVA   USSR   137   USSR   137   OLIVA   USSR   137   USSR   137   USSR   138   OLIVA   COSMOS 320   4355   USSR   27   OLIVA   COSMOS 330   OLIVA   COSMOS 33	W810	- 1	4346	FRANCE	- 1
1999   1999	9810	ME TEOD	4347	USSR	
0.019C   0.019C   0.020B   0.0	019A	METEOR	4349	USSR	i .
1020B   103103 328   1355   USSR   18     022A   C05M05 329   1355   USSR   18     022A   C05M05 329   1356   USSR   27     023A   C05M05 329   1358   USSR   27     023B   C05M05 329   1358   USSR   3     025B   C05M05 329   USSR   3     025B   C05M05 329   USSR   3     025B   C05M05 329   USSR   3     025B   C05M05 329   USSR   3     025B   C05M05 329   USSR   3     025B   C05M05 329   USSR   3     0	36.70	Chempe 327	5573	USSR	
0.2228   0.2334   0.2384   0.2384   0.2384   0.244   0.2584   0.	0208	COCKING TOP	4352	USSR	- 1
C23B   C35R	0228	CHAMPE TOO	4356	USSR	- 1
CONTROL OF CONTROL O	C23B	encure 220	4358	USSR	
1025   1025	0248	200000000000000000000000000000000000000	4361	USSR	- 1
0256B 4 467B US 8 0256B 4 4702 US 8 0256B 4 4702 US 8 0256B 47702 US 8 0256C 475B US 8 0256C 475B US 8 0256C 475B US 8 0256C 475B US 8 0256C 475B US 8 0256C 475B US 8 0256C 475B US 8 0256C 475B US 8 0256C 475B US 8 0256C 475B US 8 0256C 475B US 8 0256C 477B US 8 0256C 477B US 8 0256C 477B US 8 0256C 477B US 8 0256C 477B US 8 0256C 477B US 8 0256C 477B US 8 0256C 477B US 8 0256C 477B US 8 0256C 477B US 8 0256C 477B US 8 0256C 477B US 8			4606	Sn	- 1
0256R 4702 US 8 0256R 4732 US 8 0256R 4732 US 8 0256R 4732 US 8 0256R 4758 US 8 0256R 4858 US 8 0256R 4858 US 8 0256R 4858 US 8 0256R 4870 US 8 0257R 4870 US 8 0257R 4933 US 8 0257R 4933 US 8 0257R 4933 US 8 0256R 4947 US 8 0256R 4947 US 8 0256R 4975 US 8 0256R 4975 US 8 0256R 4975 US 8	1		4678	Sn	. 1
025CF 4732 US 8 025CF 4732 US 8 025CF 4732 US 8 025CF 4732 US 8 025CF 4758 US 8 025CF 4758 US 8 025CF 4758 US 8 025CF 4758 US 8 025CF 4758 US 8 025CF 4758 US 8 025CF 4758 US 8 025CF 4758 US 8 025CF 4758 US 8 025CF 4758 US 8 025CF 4758 US 8 025CF 4758 US 8 025CF 4758 US 8	ł		4702	Sn 50	- 1
0256V 4758 US 8 0256V 4758 US 8 0256V 4858 US 8 02570 US 8	1		4732	US CS	- 1
025EN 4858 US 8 025EN 4858 US 8 025FA 4870 US 8 025FA 4915 US 8 025FX 4931 US 8 025FX 4931 US 8 025FX 4933 US 8 025GC 4936 US 8 025GC 4977 US 8 025GC 4977 US 8 025GC 4977 US 8 025GC 4977 US 8 025GC 4977 US 8 025GC 4977 US 8 025GC 4977 US 8	1		4758	S	- 1
025FA 4870 US 8 025FH 4915 US 8 025FK 4933 US 8 025FK 4936 US 8 025FK 4936 US 8 025GC 4936 US 8 025GK 4947 US 8 025GK 4947 US 8 025GK 4947 US 8 025GK 4975 US 8 025GV 4975 US 8	İ		4858	SO	- 1
025FH 4915 US 8 025FX 4915 US 8 025FZ 4931 US 8 025GC 4936 US 8 025GK 4947 US 8 025GK 4972 US 8 025GV 4975 US 8 025GV 4975 US 8	- 1		4865 4870	Sn Sn	i
025FZ	- 1		4898	85	- 1
0256C 4933 US 8 0256C 4936 US 8 0256K 4947 US 8 0256K 4972 US 8 0256V 4975 US 8 0256V 4976 US 8	ı		4931	SO	
0256H 4976 US 8 0256K 4972 US 8 0256V 4975 US 8 0256V 4975 US 8 0256V 4976 US 8	ŀ		4933	SO	- 1
0256K 4972 US 8 0256V 4975 US 8 0256V 4976 US 8			4936		- 1
0256S 4972 US 8 0256V 4975 US 8 0256Y 4976 US 8	- 1		1947	S	ĺ
0256V 4976 US 8 4975 US 8			4972	SO	ľ
97561			4974	55	- 1
	- 1		4978	95	1

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INTER-		30 14 14 3				
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1970 LAUNCHES	(CUNI.)					
1		5023	Sn	8 APR	29 SEP 79	
1970 02546		5034	SU	•	Ę	
- 1		5190	<u>-</u>	- }	<b>₹</b>	
		5346	Sn	8 APR	14 OCT 71	
1970 025K#		5421	Sn	. ~		
		5423	30	1	4	
		5424	Sn	8 APR	19 MAR 82	
1970 025LF		5509	US	8 APR	APR	
- 1		5535	Sn	-	MAR	
		5621	S	8 APR	21 MAR 72	
1970-025MF		5825	nS	1		
		\$109	Sn	•		
		6051	Sn:			
		6084	Sh.	1		
		6140	Sn	8 APR	20 MAK 79	
1970-025NB		9997	Sn		NAD	
0264	COCMOC 331	4364	USSR	8 APR	16 APR 70	
0268		4365	USSR	8 APR	16 APR 70	AMA
4620	APOLLO 13	4372	SII	11 APR	APR	5
1970 0275	COCNDC 223	4373	USSR		1 44	
0308		4374	USSR	_		
		4395	WSSII	1	MAY	
		4375	Sn	15 APR	XXX	
1970 033A C	COSMOS 334	4378	USSR		AUG	
		4379	1558 1558	23 ABP	70 III. A	
		4397	0.550 0.550	23 APR	ا ۔	
1970 033E		4399	USSR		HAY	
9460	1	4400	DAG.	24 APK	22 HAX 83	
035A	COSMOS 335	4380	7550 11550	- 4	- 1	
1970 0398		5055	USSR		FE8	
0384	COSMOS 344	4401	USSR	ł	*	
0386		4402	2000 C	12 MAY	20 MAY 70	
₩6€0	COSHOS 345	4404	USSR			
1970 0398		4405	Sn	20 MAY	7	1
1970 0408		9044	SN .		8 MAR 74	
4140		4403	4660	NIT I	NOC	
0418		4408	NS50	- 1	3	
1970 0424	CUSAGO 240	6410	USSR	_		

CAUNCHES (COINT.)   COSMOS 349   COSMOS 34			CATAL DC			
AUNICHES (CONT.)	DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY
1416	1970 LAUNCHE					
1446		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4412	USSR	- f	FEB
1946	ı	CUSIIUS 348	4414	USSR		چ
0495			4416	USSR	- 1	Z Z
0499			4422	USSR		ב ל ב
0490	- 1	MOUNTY 1-14	4424	USSR USSR	- 1	┋╬
1949   1949	- 1		4423	USSR	t	4
1500   1500	ì	COCMOC DEMOCO	4431	USSR		MAR
USE   COSHOS 351   COSHOS 352   COSHOS 352   COSHOS 352   COSHOS 352   COSHOS 353   COSHOS 353   COSHOS 353   COSHOS 353   COSHOS 353   COSHOS 354   COSHOS 354   COSHOS 354   COSHOS 354   COSHOS 354   COSHOS 354   COSHOS 355		COSTOS JOS	4426	USSR	1	JON
1952   1958   1958   7   JUL   12 JUL   15 JUL		166 солио	4428	USSR	1	A G
1553   C05M05 353   1455   U55R   23 JUL   15	- 1	COSMUS 352	4447	USSR	7 JUL	ا ا
1556   COSMOS 354   4481   USSR 28 JUL 29	,	COSMOS 353	4455	USSR	1	┋╬
1056A   COSMOS 354   4481   USSR 28 JUL 28 JUL 28 JUL 29 JUL 256C   257A   14769   USSR 28 JUL 29 JUL 29 JUL 255C   257A   14769   USSR 28 JUL 29 JUL 29 JUL 255C   257A   14769   USSR 28 JUL 29 JUL 29 JUL 255C   257A	- 1			Sn	- 1	*
1,000   1,00			Tobb	COUR	1	JOE
1998   1998		THE DOCUME A	4479	USSR		֓֞֝֝֟֝֜֝֞֝֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֡֓֓֓֡֓֡֓֓֓֓֡֓֡֓֓֡֓֡
1775   1775			4483	USSK	7 AUG	VON
Decide		cuamua aaa	4485	USSR		AUG 0
VENERA 7	- 1	CUSMUS JOO	4488	USSR	•	2
0600 c         4491 cosmos 357         4492 cosmos 357         17 Aug cosmos 357         18 Aug cosmos 357         18 Aug cosmos 357         18 Aug cosmos 357         18 Aug cosmos 357         19 Aug cosmos 357         19 Aug cosmos 357         19 Aug cosmos 357         19 Aug cosmos 357         19 Aug cosmos 357         19 Aug cosmos 357         19 Aug cosmos 357         19 Aug cosmos 357         19 Aug cosmos 357         19 Aug cosmos 357         15 Cosmos 357	,	VENERA 7	4490	USSR	- 1	<b>A</b> 66
0638         COSMOS 357         1496         USSR         19 AUG         15 OCT           064B         4496         USSR         29 AUG         15 OCT           064C         4514         USSR         20 AUG         29 AUG           065B         4502         USSR         22 AUG         29 AUG           065B         4505         USSR         22 AUG         29 AUG           065C         4505         USSR         22 AUG         6 OCT           065E         4503         USSR         22 AUG         9 SEP           065E         4503         USSR         22 AUG         9 SEP           065E         4503         USSR         26 AUG         26 MAR           067E         4508         USSR         27 AUG         13 APR           068C         4509         USSR         29 AUG         2 SEP           068B         CDSMUS 360         4508         USSR         29 AUG         3 SEP           068B         4517         USSR         29 AUG         3 SEP           068B         4517         USSR         29 AUG         3 SEP           068B         4517         USSR         29 AUG         3 SEP			4492	SO		SEP
0638     4496     USSR     20 AUG     7 JUL       0646     4514     USSR     20 AUG     29 OUT       0658     603MUS 359     4501     USSR     22 AUG     400       0658     4502     USSR     22 AUG     400     6 NOT       0650     4505     USSR     22 AUG     6 DCT       0651     4503     USSR     22 AUG     6 DCT       0652     4503     USSR     22 AUG     9 SEP       064A     NNSS 30190     4503     USSR     26 AUG     26 MAR       064B     CDSMUS 360     4503     USSR     29 AUG     8 SEP       068C     4516     USSR     29 AUG     8 SEP       068B     4517     USSR     29 AUG     9 SEP       068B     4517     USSR     29 AUG     13 APR       068B     4517     USSR     29 AUG     15 SEP       068B     11 SEP     11 SEP	- t	COSMOS 357	4495	USSR		
O64C   O65A   COSMOS 359   O65A   COSMOS 359   O65B   O65B   O65C   O6	1		4496	USSR	i	₽ C
OGSB         COSNUS 307         4502         USSR         22 AUG         29 AUG           0650         4504         USSR         22 AUG         11 SEP           0650         4505         USSR         22 AUG         6 UCT           0650         4506         USSR         22 AUG         9 SEP           0650         4503         USSR         26 AUG         26 MAR           067E         0572         USSR         27 AUG         13 APR           068C         4503         USSR         29 AUG         8 SEP           068C         4503         USSR         29 AUG         9 SEP           068C         4516         USSR         29 AUG         9 SEP           068B         4517         USSR         29 AUG         11 SEP			4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	USSR		CT
0650 4505 USSR 22 AUG 61 OCT 0650 USSR 22 AUG 7 SEP 065E NNSS 30190 4506 4508 USSR 22 AUG 7 SEP 067E USSR 26 AUG 26 MAR 068C 4509 4516 USSR 29 AUG 8 SEP 068C 4517 USSR 29 AUG 9 SEP 068C 4517 USSR 29 AUG 9 SEP 068C 4517 USSR 29 AUG 11 SEP 068C 4517		Coanca - 337	4502	USSR		AUG SUG
065E     065E       066A     NNSS 30190       4503     US       26 AUG     26 MAR       067E     05       067E     4508       05R     27 AUG       13 APR       06BA     CDSMOS 360       4509     USSR       29 AUG     2 SEP       06BC     4516       06BC     4517       06BC     4518       =""><td></td><td></td><td>4505</td><td>USSR</td><td></td><td>130</td></t<>			4505	USSR		130
067E     637E       067E     637E       068A     COSMOS 360       450B     USSR       29 AUG     8 SEP       068C     4516       068B     4517       068B     4517       068B     4517       068B     29 AUG       15 EP       068B     4517       068B     4518       068B     4518       068B     4518       068B     4518       068B     4517       068B     4518	1	- 1	4506	USSR	- 1	¥ 5EP
CóBA     COSMOS 360     4508     USSR     29 AUG     8 SEP       3008     4509     USSR     29 AUG     2 SEP       068C     4516     USSR     29 AUG     9 SEP       068B     4517     USSR     29 AUG     11 SEP       068B     4517     USSR     29 AUG     11 SEP       068B     4517     USSR     29 AUG     11 SEP	ı	1	6372	95	1	<b>*</b>
0.68C 4516 USSR 29 AUG 9 SEP 0.68B 4517 USSR 29 AUG 11 SEP 0.68B 29 AUG 11 SEP			4508	USSR		SEP
0680 4517 USSR 29 AUG 11 SEP			4516	USSR		SEP
	- 1		4526	USSR USSR	- 1	8 4

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INTER-		CATALOC				
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1970 LAUNCHES (CONT.)						
		4525	USSR	8 SEP	14 SEP 70	
1970 6716 1970 6710		4546	USSR	8 SEP	SE S	
- {		4527	MSSN	ł	24 SEP 70	*d¥
1970 0728		4528 4529	USSK	12 SEP 12 SEP	1	
073A COSMOS	362	4536	USSR	16 SEP	OCT	
G74A COSMUS	363	4538	USSR	17 SEP	!	
1970 075A COSMOS 36	364	4553	USSR	•	0CT	
1970 0758 1970 075C		4563	USSR	22 SEP 22 SEP		
1970 0764 COSMOS 36	365	4557	USSR	1	SEP 7	
- 1		4558	USSR		<b>43</b>	
077A MOLNIYA	1-15	4569	USSR	29 SEP 29 SEP	20 MAR 76	
		4560	USSR		200	
1970 077E		5950	USSR	t	APR 7	
1970 0784 CDSMDS 366	99	4561	USSR	1 001	6 OCT 70	
- 1		4565	USSR	- 1	130	
		4566	USSR	3 OCT	31 OCT 70	
		4568	USSR	3 OCT		
1970 0804 C05MUS 368	89	4572	USSR	8 OCT		
1970 080C 1970 080D		4582	USSR	8 DCT		
1970 080E CUSMUS 34	369	4585	USSR	8 00.1	22 JAN 71	
0818		4574	USSR	- 1	ADN	
082A COSMOS	370	4576	USSR	9 OCT	22 OCT 70	
082C		4593	USSR		. —	
1970 0848	, <del>10</del>	4581	USSR	ł	l	
	43	4590	USSR	20 0CT 20 DCT	18 JAN 71	
			7550 7550	- 1	130	
		4592	USSR		26 OCT 70	
1970 089M		4670	USSR	1 -	APR	
		4671	USSR		NY T	
		4824	USSR	23 OCT	21 OCT 79	
1970 0894		5029	USSR	23 OCT	•	
- 1		8905	MSSN	23 001	5 DEC 76-	

DECAYED DBJECTS

INTER-		מבנאובט טטטבנוס				
DESIGNATION	NAME	CATALOG NUMBER	SOURCE	LAUNCH	DECAY	NOTE
1970 LAUNCHES (CONT	7.)					
1970 089AG		5069	USSR	23 OCT	22 EER 72	
1970 089AJ		5072	HS SB	23 061		
		5073	U55R	23 85	26 JH 71	
1970 039AM		5074	USSR		APR	
		5079	USSR	23 OCT	26 MAR 79	
1970 089AU		5080	USSR		\$ <b>\$</b>	
- 1		5096	USSR	23 061	75 001 01	
1970 089AW		5132	USSR	23 OCT		
		5138	USSR	23 OCT	24 MAR 72	
1970 08980		5199	885FI			
- 1		5202	USSR	23 067	23 106 77	
1970 08981		4226	USSR		DEC	
		5279	USSR	23 OCT	22 NOV 82	
1970 0398M		5294	USSR	23 OCT		
1970 08984		5321	U55R	\$	#	
- 1		5411	USSR	23 067	1	
1970 00984		2146	USSR		APR	
1		5431	CSSR	23 OCT	1	
		5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	USSR	23 OCT	21 APR 80	
1970 08900		5455 5456	USSR	23 OCT		
		5450	USSR	#	***	
1970 08966		5524	USSR	23 OCT	24 FEB 81	
l		5796	USSR		6 AUG 72	
		5896	USSR	23 OCT	2 APR 73	
1970 089CR		5898 5898	USSR			
		5963	USSR	#	\$	
1970 0934		6177	USSR		N	
		4626	USSR	30 001	20 FEB 80	
- 1		1662	USSR		*	
1970 C91AA		4729	USSR	30 OCT	OCT	
		4731	USSR	30 001	24 FEB 81	
1970 091AF		482B	U55R	- 1		
		100	1000	30 001		

OF POOR QUALITY

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1970 LAUNCHES	(CONT.)					
1970 091AN		5084	USSR	30 OCT	22 NOV 82	
1970 091AP	COSMOS 376	4599	USSR			
0928	;	1600	USSR	1		
		4700	USSR	30 UCI	07 NON 2	
1970 0936 1970 094A U	0F0 1	4690	S	AON 6	9 MAY 71	
8463	RMS	4693	NS	l	DEC	
1970 0940		4747	Sn		¥ :	
094E		484	Sn	YON OT	21 JAN 71 17 NOV 70	PA
.95A	LUNA 17	4694	USSR		Š	
1970 0956		,663	NSSN	- 1	7	
096A	CUSMUS 377	4695	USSR	11 NOV	23 NOV 70	
6969		4696	3440 03311	Ι.	AUG	
097A	COSMOS 378	4 ( 1.5	A220		SEP	
1970 098A		4721	S	18 NOV	11 DEC 70	
8860		4722	93301	24 NOV	d L	
¥660	CDSMUS 379	4760	USSR	- 1		
1970 099C		4780	USSR	24 NOV	13 FEB 71	
0660	- 1	4817	8551	1	17 JUN 71	
100A	CDSMUS 380	4182		•	4	
1970 101A	MOLNIYA 1-16	6174	USSR	27 NOV	25 NOV 75	
- 1		4781	166B	ĺ	DEC	
		4385	USSR	t	2 JAN 76	
1970 103E		5326	USSR	2 DEC	3 JAN 77	
1970 103F	COSMOS 383	4787	USSR	3 060		
840		4788	USSR	10 0EC	EC.	
105A	CO SMOS 384	4791	MSSU	- 1	DEC	
1970 105C		4795	USSR	10 DEC	18 DEC 70	
- 1		4796	0001	10 DEC	DEC	
105E		4810	ST.	- 1	App	
1970 107A	EXPLUKER PE	4798	ns n	12 DEC.	15 DEC 78	
- 1	PEOLE	4801	FRANCE	12 050	X	
		4803	FKANCE	- 1	d	
1970 109E		5264	FRANCE		6 JAN 80	
- 1		5952	FRANCE	15 050	ı	
	COSMUS 386	\$00¢	USSK	- 1	34	
- 1970 1108		4808	USSR	15 DEC	17 DEC 70	

	3 MAD 71		USSR	4959	COSMOS 396 '	AP10
	N	17 FEB	USSR	5002		1971 0130
	15 FEB 72		USSR	1,005		- 1
		1	USSR	4956		
			JATAN	1507 6146	COSMOS 395	1971 0134
	****		055R	1268		
	MAR.	9 FEB	USSR	4923		
<u> </u>	1		\$6	5974		1971 0096
	7 FEB 71		SN	4905	LUNAR MODULE	
A L			S	4900	APOLLO 14	1971 008A
	*	NAT 92	NS SN	4885	1	0078
	16 JUN 71	NVF 92	USSR	4884	COSMOS 393	007A
			S	4875		1971 0056
	+		68	4874		- 1
			USSR	4873		•
	1 400 /1	14L 44	6007	4877	COSMOS 392	
	•		855K	4848	- CO 30103 5 7 1	0028
	27 JAN 71		USSR	4886	COCHOC 301	
			US-5R	<del></del>		- 1
	L AN		USSR	4879		
	Ž	12 JAN	USSR	4876 4876		1971 0016
	4		USSR	4845	CU3MU3 390	1971 0018
<b>&gt;</b>	NOC	CNKN	S	5309		-
						1971 LAUNCHES
	FEB		USSR	6313		1970 1146
	2		US-58	+837		
	2 JAN 71		USSR	4833		
	FEB		USSR	4831		1970 1140
	*		USSR	4830		- 1
		25 DEC	USSR	4829	MOLNIYA 1-17	
	FEB		USSR	4812		1970 1136
	1		W858	+011	<del>CDSM85 300</del>	- 1
		16 DEC	USSR	4816		
	DEC		USSR	4809		1970 1110
	**		USSR			- 1
	19 JAN 80	16 DEC	USSR	4806	COSMOS 387	
	3 JAN 71		USSR	4836		1970 110E
					S (CONT.)	1970 LAUNCHES
NOTE	DE¡CAY	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION

CAUNCHES (CONT.)   CONT.   C		AUNCH DECAY	NOTES
014C         4961         USSR         18           014C         9005         USSR         18           014B         9005         USSR         25           015A         9005         USSR         25           015A         9005         USSR         25           015A         900         USSR         25           015A         900         USSR         25           015A         900         USSR         25           015BA         900         USSR         26           015BA         900         USSR         25           015BA         900         USSR         26           015BA         900         USSR         26           015BA         900			
0140         0140         1964         USSR         19           0146         900         USSR         18           0154         496         USSR         25           0156         496         USSR         25           017         496         USSR         25           018         496<	USSR	FEB 20	
0116         5005         USSR         19           0116         6906         USSR         25           01540         9005         USSR         25           01540         9130         USSR         25           01540         9130         USSR         25           01540         9130         USSR         25           01540         9130         USSR         25           01554         9130         USSR         25           01554         9130         USSR         25           01554         9130         USSR         25           01564         9130         USSR         25           01564         9130         USSR         25           01564         9130         USSR         25           01564         9140         USSR         25           01566         9140         USSR         25           01567         9140         USSR         25           01567         9140         USSR         25           01567         9140         USSR         25           01568         9140         USSR         27           01569		558 21	
15.80         10.58         10.58         25.5           015.40         015.40         015.80         015.80         015.80           015.40         015.40         015.80         015.80         25.60         015.80         25.60         015.80         25.60         <			3
1540   1550		FEB	
1548   1558   1559   1558		4	
195R         9194         USSR         25           015AR         5261         USSR         25           015BA         5262         USSR         25           015BA         5223         USSR         25           015BA         5415         USSR         25           015BA         5423         USSR         25           015BA         5424         USSR         25           015BA         5425         USSR         25           015BA         5425         USSR         25           015BA         5425         USSR         25           015BA         5532         USSR         25           015BA         5532         USSR         25           015BA         5532         USSR         25           015BA         5532         USSR         25           016B         5043         USSR         25           017C         5044         USSR         26           017C         5044         USSR         24           017B         5044         USSR         27           019B         5144         USSR         27           019B		FEB 8 MAR	
0156A         5261         USSR         25           0156B         5274         USSR         25           0156C         5274         USSR         25           0156B         5233         USSR         25           0156B         5532         USSR         25           0156B         6047         USSR         25           016B         5047         USSR         25           016B         5049         USSR         26           017C         5047         USSR         26           017C         5049         USSR         26           017C         5049         USSR         27           017C         5049         USSR         24           019B         5049         USSR         24           019B         5049         USSR         24           019B         5044         USSR         24           019B		FEB 25	
01580         5271         USSR         25           01586         9323         USSR         25           01586         9528         USSR         25           01586         9528         USSR         25           01584         9528         USSR         25           01586         6043         USSR         25           01586         6043         USSR         25           01586         6043         USSR         25           0168         6043         USSR         25           0169         6043         USSR         25           0160         6043         USSR         25           0160         6043         USSR         25           0160         6044         USSR         26           0176         6040         USSR         26           0176         6041         USSR         26           0176         6047         USSR         26           0176         6047         USSR         27           0176         6047         USSR         27           0176         6047         USSR         27           0176 <t< td=""><td></td><td>FEB</td><td></td></t<>		FEB	
1586   1587		FEB 19	
0158H         5415         USSR         25           0158H         5532         USSR         25           0158H         5532         USSR         25           0158H         5532         USSR         25           0156H         5532         USSR         25           0156H         5003         USSR         25           0166         5004         USSR         26           0176         5003         USSR         26           0176         5003         USSR         26           0176         5003         USSR         26           0176         5003         USSR         26           0176         5004         USSR         26           0176         5004         USSR         26           0176         5004         USSR         26           0180         5004         USSR         3           0190         5004<		FEB 13	
0.15 BH         9532         USSR         25           0.15 BH         5532         USSR         25           0.15 GE         6043         USSR         25           0.15 GE         6043         USSR         25           0.15 GE         6043         USSR         25           0.16 GE         6049         USSR         26           0.16 GE         6040         USSR         26           0.16 GE         6040         USSR         26           0.17 GE         6040         USSR         26           0.17 GE         5040         USSR         26           0.17 GE         5040         USSR         3           0.18 GE         5040         USSR         3           0.18 GE         5040         USSR         3           0.18 GE         5040         USSR         3           0.19 GE         5040         USSR         3           0.19 GE         5040         USSR         3           0.19 GE         5040         USSR         3           0.19 GE         5040         USSR         3           0.20 GE         5040         USSR         3		EEB 0 III	
0158H         5532         USSR         25           0156E         6943         USSR         25           0156         6043         USSR         25           0156         6043         USSR         25           0166         6036         USSR         26           0166         5039         USSR         26           0170         5047         USSR         3           0170         5047         USSR         3           0170         5047         USSR         3           0170         5047         USSR         3           0170         5049         USSR         3           0180         5040         USSR         3           0190         5044         USSR         3           0190         5044         USSR         3           0190         5046         USSR         3           0190         5046         USSR         27           0224         5087         USSR         27           0236         5087         USSR         27           0236         5087         USSR         27           0236         5107		FEB 21 FEB 7	
015CE         015CE <th< td=""><td></td><td>FEB 16</td><td></td></th<>		FEB 16	
U15CG         6043         USSR         25           016B         4967         USSR         26           016B         5039         USSR         26           016C         5039         USSR         26           017C         USSR         3           017C         5047         USSR         3           017C         5047         USSR         3           017C         5047         USSR         3           017C         5047         USSR         3           017C         5049         USSR         3           018b         5049         USSR         3           019c         5049         USSR         3           019d         USSR         13           019d         USSR         13           019d         USSR         24           023d         USSR         27           023d         USSR         27           023d         USSR         27           025d         USSR         27           025d         USSR         27           025d         USSR         27           025d         USSR         2		FEB 5 0CT	
0166         4967         USSR         26           0166         5009         USSR         26           0166         5009         USSR         26           0170         USSR         3           0180         USSR         3           0190         USSR         13           0190         USSR         24           0190         USSR         27           0230         USSR         27           0246         USSR         27           0250         USSR         27           0250         USSR         27           0250         USSR         27     <		FE8 31.	
0106b         990f         USSR         20           016c         5039         USSR         26           016b         5040         USSR         26           017c         USSR         3           019c         USSR         3           019c         USSR         3           019c         USSR         13           019c         USSR         24           019c         USSR         27           023b         5046         USSR         27           023b         5059         USSR         27           023b         5120         USSR         27           023c         5120         USSR         27           025c         5107         USSR         27           025c         5110         USSR         27           025c         5110         USSR         27 <t< td=""><td></td><td></td><td></td></t<>			
0160         5039         USSR         26           017A         COSMOS 399         5043         USSR         3           017B         5049         USSR         3           017C         5049         USSR         3           017C         5049         USSR         3           017B         5049         USSR         3           018B         5040         USSR         3           019B         5044         USSR         24           019B         5046         USSR         24           023A         5045         USSR         24           023B         5059         USSR         27           023B         5120         USSR         27           023B         5120         USSR         27           025B         5107         USSR         27           025B		FE8 12	
016E         USSR         26           017A         COSMOS 399         5003         USSR         3           017B         017C         USSR         3           017C         5049         USSR         3           017C         USSR         3           017C         USSR         3           018B         USSR         3           019B         EXPLORER 42         5049         USSR           019B         USSR         13           019C         USSR         24           022A         5046         USSR         27           023B         512C         USSR         27           023B         512C         USSR         1           025B         5107         USSR         1           025B         5107         USSR         2		FE8 28	
0.17A         COSMOS 399         5003         USSR         3           0.17C         5004         USSR         3           0.17C         5004         USSR         3           0.17C         5004         USSR         3           0.18B         5004         USSR         3           0.19A         EXPLORER 43         5004         USSR         3           0.19B         5004         USSR         13           0.19B         5004         USSR         13           0.19B         5004         USSR         13           0.19B         0.19B         USSR         13           0.19B         0.19B         USSR         13           0.19B         0.19B         USSR         13           0.19B         0.19B         USSR         14           0.19B         0.19B         USSR         24           0.19B         0.19B         USSR         27           0.25B         0.25B         0.15B         11           0.25B         0.25B         0.10B         0.15B           0.25B         0.25B         0.10B         0.10B           0.25B         0.10B		FEB 23 MA	
017C         015R         3           017C         015R         3           017E         5049         USSR         3           017E         5049         USSR         3           018B         5041         PRC         3           019B         FARC         3           019B         USSR         13           019C         USSR         13           019C         USSR         24           022A         USSR         27           023B         5059         USSR         27           023B         5119         USSR         27           023B         5120         USSR         27           025B         5120         USSR         27           025B         5107         USSR         27           025B         5109         USSR         27           025B         5100         USSR         27           025B         5110         USSR         27 <td>USSR</td> <td></td> <td></td>	USSR		
0170         USSR         3           0176         USSR         3           0186         PRC         3           0198         FRC         3           0198         EXPLORER 43         5044         US         13           0196         FORM         US         13           0196         FORM         US         13           0197         US         US         13           0196         FORM         US         13           0197         US         US         14           022A         US         US         24           023B         US         US         27           023C         US         US         27           023B         US         US         27           023C         US         US         27           023B         S119         US         27           025C         US         S107         US         27           025C         US         S109         US         27           025C         US         S109         US         27           025C         US         US         21 <td>USSR</td> <td>HAR 25</td> <td></td>	USSR	HAR 25	
017E         MARG         2         5007         PRC         3           018B         5004         US         13           019B         5004         US         13           019B         5004         US         13           019C         019C         US         13           019C         US         01         13           019C         US         01         24           019C         US         27         27           023B         5119         USSR         27           023C         512D         USSR         27           023C         512D         USSR         27           025C         512D         USSR         1           025C         5107         USSR         2           025C         5110         USSR         2           025C         5110         USSR         2           025C <td< td=""><td>USSR</td><td>MAR 31</td><td></td></td<>	USSR	MAR 31	
01804         MAD 2         5041         PRC         3           0186         5041         US         13           0196         5044         US         13           0196         5044         US         13           0196         5046         US         13           0197         0196         US         13           0196         5016         US         14           023         623         USSR         27           0236         512         USSR         27           0236         512         USSR         27           0236         USSR         27           0256         5107         USSR         1           0250         5110         USSR         2           0250         5110         USSR         2           0250         5110         USSR         2           0250         5120         USSR	USSR		
U180         EXPLORER 43         5044         US         13           0196         0196         US         13           0196         5046         US         13           0197         0196         US         13           0196         0196         US         13           0196         0196         US         13           0197         0196         US         13           0196         0196         US         24           0234         0236         USSR         27           0236         0256         USSR         27           0256         0256         USSR         1           0250         0250         USSR         1           0250         0250         USSR         1           0250         0250         USSR         2           0250         02	DOC	MAR 16	
0196         5044         US         13           0190         0190         US         13           0190         0190         US         13           0190         0190         US         13           0190         USSA         USSA         24           0234         C0236         USSA         27           0236         USSA         27           0236         USSA         27           0236         USSA         27           0236         USSA         27           0256         USSA         1           0250         USSA         1           0250         USSA         2           0250         USSA         2           5110         USSA         2           0250         USSA         2           5111         USSA         2           5121         USSA         2	, , , , , , , , , , , , , , , , , , ,	MAR 2 OCT	
0190         US         13           0190         US         13           0190         US         13           0190         US         13           022A         USSR         27           023A         USSR         27           023C         USSR         27           023C         USSR         27           023C         5120         USSR         27           023C         5121         USSR         27           025C         5107         USSR         1           025C         5107         USSR         1           025C         5110         USSR         1           025C         5110         USSR         2           025C		HAR 22 H	
0190 019E 022A 023A 023B 023B 023B 023C 023C 025C 025B 025C		•	
0.22A     0.59     0.5     24       0.23A     CBSMDS 401     5084     0.5SR     27       0.23B     0.55R     27     0.5SR     27       0.23D     0.25R     27     27       0.25B     0.5SR     27     27       0.25B     0.5SR     1     27       0.25B     0.5SR     1     1       0.25D     0.5SR     1     0.5SR     1       0.25D     0.5SR     1     0.5SR     1       0.25D     0.5SR     0.5SR     1       0.25D     0.5SR     0.5SR     2       0.25D     0.5SR     0.5SR     2       0.25D     0.5SR     2       0.25D     0.5SR     2       0.25D     0.5SR     2       0.25D     0.5SR     2       0.25D     0.5SR     2       0.25D     0.5SR     2       0.25D     0.5SR     2       0.25D     0.5SR     2       0.25D     0.5SR     2       0.25D     0.5SR     2       0.25D     0.5SR     2       0.25D     0.5SR     2       0.25D     0.5SR     2       0.25D     0.5SR     2 <td></td> <td>MAR 19</td> <td></td>		MAR 19	
023A         CUSMUS A01         5087         USSR         27           023B         5087         USSR         27           023D         USSR         27           023B         USSR         27           023C         USSR         27           025B         USSR         1           025C         5110         USSR         1           025D         5109         USSR         1           025D         USSR         1         1           025D         USSR         1         1           025D         USSR         2         2           025D         USSR         2           025D         USSR         2           025D         USSR         2           025D         USSR         2		MAR 12	
023B         5087         USSR         27           023C         025C         055R         27           023D         025R         27           023E         5120         055R         27           025B         5107         055R         1           025C         5110         055R         1           025C         5110         055R         1           025C         5109         055R         1           025C         5109         055R         2           025C         5108         055R         2           025C         055C         055C         055C		MAR	
0230 055R 27 0230 055R 27 0230 055R 27 025B 5107 055R 1 025C 5109 055R 1 025C 5109 055R 1 025C 5109 055R 1			
0236 0236 0258 0258 0256 0250 0250 0250 0250 0250 0250 0250		MAR 12	
0.258 0.258 1 0.258 1 0.258 1 0.258 1 0.258 1 0.258 1 0.259 0.250 0.250 0.258 1 0.258 1 0.258 2 0.258		MAR 12	
0250 0250 USSR 1 0254 CUSMUS 403 5100 USSR 2 0264 CUSMUS 403 5108 USSR 2 0264 CUSMUS 403 5111 USSR 2	USSR	APR 6	
0250 0250 0350 0350 0350 0550 0550 0550	8331	ł	
Cocke Clarify Co. 5111 USSR 2	855H	APR 14	
1110	USSR	APR 5	
027A CUSANDS 40A 5113 USSR	USSR	APR	
C278	USSR		

	-10 JUN 71	28 MAY	USSR	5249	424 COUICO	0488	1971
	AUG		USSR	5247	COCHCIC ADA	0478	1971
	1	1	USSR	5246	COSMOS 423	047A	1971
	27 NOV 71	TO MAY	USSR	5739	CAPSULE	0450	1971
	MAY	19 MAY	USSR	5236		1 0456	3:1
	#		USSR	5233		- 1	1911
			USSR	5232	COSMOS 421	044A	1971
	30 MAY 71	T8 MAY	USSR	1626		3640 1	<del>131</del> 1
	4	ф	0558	5250			1771
	21 HAY 71		USSR	5231		043B	1971
	MAY	1	CUUX	1226	COSMOS 420	043A	3
	*	<b>የ</b>	0558	5229	- 1	0400	1771
	25 MAY 71	6 MAY	USSR	5228			1971
	•	6 MAY	USSR	5207	COSMOS 410	040A	1971 <del>1971</del>
	27 JET 11	1	550	5206		- 1	1971
	6 4	24 APR	855K	5178	400	0378	1971
	NO.	24 APR	ITALY	5176	SAN MARCO 3	036A	1971
	24 APR 71	22 APR	USSR	27.15	30101 10	0940	1
		22 APR	SA	5171	. [	- 1	1971
	21 APR 71	19 APR	USSR	5168			1971
	A PR		USSR	5166		1 032E	1971
	20 APR 71	LY APK	USSR	6916			1
	*	- 1	USSA	2162		3650 17	1971
	DCT.	19 APR	USSR	5160	SALYUT 1		1971
	13 JUL 72	15 APR	FRANCE	5269		1 0306	1971 1971
	#	1	FRANCE	5164		ł	
	15 APR 76	15 APR	FRANCE	5141			1971
	ב	•	FRANCE	5139		11 030C	1971
	08 NAV 82	15 APR	FRANCE	5615			152
	*	- 1	USSR	5179	לחווטאב כחו	1020 1	1971
	28 APR 71	14 APR	USSR	5170			1971
		14 APR	USSR	5127		1 0296 1 0290	1971 1761
	* T	- 1	USSR	5125		- 1	132
	24 APR 71	1♦ APR	USSR	5124	COSMOS 406		1971
	APR	4 APR	USSR	5116		71 0270	1971
					S (CUNT.)	LAUNCHE	1971
NOTES	DECAY	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION	DE :
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DESIGNATION  1971 LAUNCHES (CUNT  1971 0480  1971 0486  1971 0486  1971 0496  1971 0496  1971 0496  1971 0508  1971 0508  1971 0508  1971 0508	(CUNT.)	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
LAUNCHES 0480 0480 0496 0496 0496 0496 0504 0500 0500	:ONT.)					
0480 0496 0490 0490 0504 0500 0500						
0498 0490 0490 0504 0500 0500 0500		5287	USSR	28 MAY	11 JUN 71	
0490 0490 049E 050A 050C 050C 050E		5255	USSR	ŀ	l l	
0490 049E 050A 050C 050C 050E		5256	USSR		31 MAY 71-	
0508 0508 0500 0500 0500		5263	USSR			Č
050A 050B 050C 050D 050E	w	2995	HSSN.			*
	SMDS 425	5253 6264	USSK	29 MAY	28 NDV 29	
- 1		5257	USSR		HAR	
		5258	USSR		Ί.	
		5259	USSR			
		5299	8930	- 29 MAY		
_		27/6	USSK	NOC +	21 CED 74	
1971 0525		5782	USSR	NOT +		
- 1		5956	USSR	- X57	944	
053A	SQYUZ 11	5283	USSR	NOF 9	29 JUN 71	<b>≯</b> Ø <b>∀</b>
1971 0538		5284	USSR	ł	\$	
054A		5285	Sn	N .	31 JAN 82	
¥550		(A) (A)	<b>2000</b>	11 11	1	
1971 0558		5290	USSK	11 JON	X 3	
1971 0550		5303	USSR		S	
		5304	USSR	NOT T		
		5297	\$n	-		
6568	ŧ	9536	60.011	70 40	7, 111 7,	
1971 057A CUS	CUSMUS 428	5505	USSF	ł	- 1	
		5307	USSR			
•		5308	USER	1	1	
		5313	USSR	24 JUN	7 JUL 71	
1971 0576		5315	USSP	•	13 JUL 71	
4850	EXPLORER 44	5317		AUN B		
0588		5318	Sn.		28 JAN 76	
I.		5319	30	1	1	
		5320	0.5	16 118		
1971 060A		5329	SO		AUG.	
4190	65 \$ 50 S	5331	USSR	20 JUL	9A4	
0618		5332	USSR	20 JUL		
- 1		5370	USSR	1	<b>3</b>	
		5371	USSR	20 JUL	4 AUG 71	
1971 0624 CD	0.5 4 30 MSC	5340	USSR	23 JUL	5 AUG 71	
06.20	- 1	5341	USSR	- [	29 JUL 71	
		5342	USSR		26 JUL 71	
- 1		5343	USSR	- 1	- 1	
		5374	USSR	23 JUL	6 AUG 71	

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· •	AN		USSR	5461	COSMOS 436	
	- 14 d35 g	- 1	USSR	5453		1971 0736
	_	2 SEP	USSR	5451		
•	5	1	W55R	5450		1971 0736
<b>*</b>			USSR	5448	LUNA 18	1971 073A
•	1	1	USSR	5442		1971 0728
	Z	_	USSR	5441	COSMOS 435	1971 072A
•	4	1		5452		1971 0706
	SEP	_	S	5409		1971 070A
1	#	1	W558	5420		1
	SEP	12 AUG	USSR	5427		
•	1	1	USSR	5408	L	
	A G	_	USSR	5407	COSMOS 434	
•	-	ŧ	#258	5404		1
	10 AUG 71	8 AUG	CSSR	5403		
1	\$	1	0558	540/	CB3MB3 433	
	_	7 AUG	US	5410		1971 067P
1				5406		١,
	A 0	7 AUG	500	50.00		•
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	19 SEP 71	7 AUG	Sn	5383	DAR-907	1971 0670
Ī		7 AUG	60	5594 	041-50	TAL OUTA
Į		- 1	) S S S S S S S S S S S S S S S S S S S	5204	OV 1 - 30	- 1
	AUG	5 AUG	USSR	5436		
ł	\$	ı	035K	5301		_ ]
	AUG	5 AUG	USSR	5380		
•	10 486 41	2 × 500	USSR		COSMOS 432	1971 COGA
		30 JUL	USSR	5369		_
1	<b>*</b>	1	RSSR	5365		1
			USSR	5364	COSMUS 431	
1	2 4 700 11	30 305	HSCR.	5350		1
	- 1	- 1	Neco	5355		1971 0645
	A UG		USSR	5354		l '_
	29 AUG 71	28 JUL	USSR	5353	er er, er er er er er er er er er er er er er	1
			USSR	5367	MOLNIYA 1-18	•
	\$	- 1	SA	5366	LUNAR MODULE	1
, G 4			US	5352		
	7 406 71	20 305	COOK	5351	APOLEO 15	
Lippiness	115	- 1	93311	2062		1971 062C
					S (CONT.)	1971 LAUNCHES
NOTES	DECAY	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION

INIEKT		CATALOC				
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1971 LAUNCHES (CONT	NT.)					
ľ		5777	USSR	7 SEP	11 JUN 72	
1971 074M		5779	8330 8331	7 550		
		5783	7550 USSB	7 SEP	٠. ا	
0740		5783	USSR		3	
1971 0758	494	5467	USSR	10 SEP	N N	
- 1		8779	USSR	·		
		5468	Sn			
1971 076C		6181	ns	10 SEP	29 MAR 73	
	35 438	5475	USSA	- 1	SEP	
971 0778		5476	USSR	14 SEP	22 SEP 71	
ı		5482	USSR	14 SEP	28 SEP 71	
971 077E		5483	USSR	- 1		
077F		5484	USSR	14 SEP	30 SEP 71	
1971 0788		5479	USSR	21 SEP	27 SEP 71	
	04 40	6480	USSR	- 1	3	
0798		5481	USSR	24 SEP		
1971 0818		5487	USSR	28 SEP	3 OCT 71	
1971 081C		5495	USSR	- 1	6 OCT 71	
		5496	USSR	28 SEP		
1971 081F		5542	USSR	28 SEP	11 OCT 71	
		5543	MS 50	- 1	12 007 71	
		5489	USSR	28 SEP	1 OCT 71	
1971 083A DSD	7	5491	SN	29 SEP	9 JUL 74	
9690	<b>.</b>	5402			21 550 78	
1971 0830		5499	US	29 SEP	24 JAN 74	
	05 442	5493	USSR		ŀ	
		5497	9550	29 SEP	1, 200 21	
1971 0840		SST	ASSU MSSB	1	- 1	
. 084E		5546	USSR			
1	95 443	5536	USSR	1007	13 004 31	
1971 0858		5536	ASSU.	2 001	1	
		5539	USSR	7 OCT	_	
1971 085E		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	855H	7 001	30 OCT 71	
- 1	254 50	5558	USSR	14 001	- 1	
0886		5559	USSR	_		
1971 0886		5578	XAAD	14 001	31 001 71	

DESIGNATION NATIONAL	NAME	CATALOG NUMBER	SOURCE	LAUNCH	DEÇAY
1971 LAUNCHES	ES (CONT.)				
71	, ; <b>,</b> , , , , , , , , , , , , , , , , , ,	5590	USSR	14 001	AON
	CUSHUS 453	5564 5564	USSR	19 OCT	- 1
1971 0906		5596	US WSSR	21 OCT	- 1
•		5566	85	1	14 AON 91
		5570 5572	US		FEB
· 1		5602	S	21 OCT	1
1971 092A		5575 5606	50		
		5502	00	23 061	17 ACN 11
	COSMOS 454	5585	USSR		ADN
		5603	USSR	2 NOV	22 NOV 71
1971 094E		5605	USSR	2 NOV	22 NOV 71
- 1	COSMOS 455	5608 5608	USSR	17 NOV	9 APR 72
1971 098A	COSMUS 456	5603	USSR	19 NOV	2 DFC 71
	- 1	5612	USSR		\$
1971 098C		5613	USSR	19 NOV	١
l l		5639	USSR	i i	DEC
		5653	USSR		DEC.
1971 100A	MOLNIYA 2-1	5620	USSR	24 NOV	10 MAY 76
1971 1008 1971 100C		8195 2017	USSR	24 NOV	30 DEC 71
- 1		5619	#558		#
1971 100E	COSMOS 458	5689	USSR	ZA NOV	5 JAN 74
		5624	USSR		FE B
1971 102A 1971 102B	CD5MDS 459	5625 5626	USSR	29 NOV	27 0EC 71
- 1		5627	855R		956
l	CUSMUS 460	5628	USSR		L .
1971 103C		5630	USSR	30 NOV	21 NOV 72
	INTERCOSMOS 5	5641	USSR	- F	3
		5642	USSR	2 DEC	NA R
1971 1046	- 1	5645	USSA	- 1	
1971 1058	COSHOO FOT	5044	USSR	1	29 APR 79
_		5647	USSR	2 DEC	APR
1971 1064	COSMOS 462	5646 5646	11888 0358 0458 11888	- 1	4 APR 75

DESIGNATION	UNAN.				
		NUMBER	SOURCE	LAUNCH	DECAY
	IES (CONT.)				
		5650	USSR	3 DEC	5 JAN 72
-		5651	USSR	1	
		5652		3 DEC	0 0 0
1071 1066		5054	ACCO.	3 050	21 MAP 72
- !		5656	ASSU USSB	- 1	0.0
		5658	USSR	3 DEC	DEC
		9696	USSR		
		5660	USSR	3 DEC	20 MAR 72
1971 100H		5665	93311	3 050	200
- 1		5005	A550	3 DEC	MAR
		5668	USSR		NAD
1971 196R		5672	USSR	3966	12 050 51
		5673	USSR	3 DEC	HAR
1931 1261		5798	USSR		448
		5199	USSR	3 DEC	18 MAR 72
1971 1040		5900	115 CD	2 050	1
		2001	4550	1	950
		5803	USSR	3 DEC	FE8
- 1		5831	USSR	- 1	AAR A
		5832	USSR	3 DEC	
1		5833	USSR.	3 0EC	1
		5834	USSK	3 DEC	19 MAK (2
1971 106AF		5867	USSR	3 DEC	
	C05405	566	855A	- 1	PEC
• • •		5662	USSR		DEC
- 3201 1261		5663	USSR	1	
		5669	USSR	6 DEC	15 DEC 71
		54.71	dssii	10 05	
1971 1066		5674	7550 1550	•	- 1
		5684	USSR		
1		5686	USSR	10 DEC	
-	ARIEL 4	5675	Š	11 060	12 DEC 78
1071 1000		5677	511	11 DEC	•
		5020	Sn	- 1	- 1
	COSMOS 466	5687	USSR		DEC
1971 1128		5688	USSR	- 1	950
		5725	USSR	16 DEC	3 JAN 72
1	C 20 8 4 7	5.704	8551	ı	APR
1971 113A		5706	455A		
	MOLNIYA 1-19	5712	USSR		
- 1		5713	USSR	19 DEC	22 SEP 7
		5708	USSR		26 JAN 72

NCHES (CONT.)  NCHES (CONT.)  NCHES (CONT.)  NCHES (CONT.)  STATE	NATIONAL		CATAL DG			
LAUNCHES (CONT.)   1118   1188   1118   1188   1118   1118   1118   1118   1118   1118   1118   1118   1188   1118   11	DESIGNATION	NAME	NUMBER	SOURCE	AUNC	<u>5</u>
1118		S (CONT.				
1146   COSHOS 470   5779   USSR   27 BEC   5 AM   1160   1772   USSR   27 BEC   5 AM   1160   1772   USSR   27 BEC   5 AM   1160   1772   USSR   27 BEC   5 AM   1160   1772   USSR   27 BEC   5 AM   1160   1772   USSR   27 BEC   5 AM   1170   USSR   27 BEC   5 AM   1170   USSR   27 BEC   5 AM   1170   USSR   27 BEC   2 AM   27 BEC   2 AM   27 BEC   2 AM   27 BEC   2 AM   27 BEC   2 AM   27 BEC   2 AM   27 BEC   2 AM   27 BEC   2 AM   27 BEC   2 AM   27 BEC   2 AM   27 BEC   2 AM   27 BEC   2 AM   2 A			5737	USSR	E I	FEB
1186   5720   USSR   27 BCC   5 ANN   1186   5741   USSR   27 BCC   5 ANN   1186   5741   USSR   27 BCC   5 ANN   1186   5741   USSR   27 BCC   5 ANN   1186   5741   USSR   27 BCC   5 ANN   1186   5742   USSR   27 BCC   7 ANN   1186   TANN   USSR   27 BCC   7 ANN   1186   TANN   USSR   27 BCC   27 ANN   1186   TANN   USSR   27 BCC   27 ANN   1186   TANN   USSR   27 BCC   27 ANN   TANN   USSR   27 BCC   27 ANN   TANN   USSR   12 ANN   25 ANN   USSR   12 ANN   25 ANN   USSR   12 ANN   USSR   12 ANN   USSR   USSR   12 ANN   USSR	- 1	<b>\$</b>	5727 5727	USSR	문	- 1
1118   274   USSR   27 DEC   7 JAN   1119	- 1		5728 5740	USSR	유유	NA C
1119	ł		5741	USSR	ᇣᄷ	_
Table   Cosho   Cosh	- 1		5962	USSR	#	#
LAUNCHES  LAUNCHES  LAUNCHES  UOLA COSMUS 471 5764 USSR 25 DEC 24 APR COSMUS 471 5764 USSR 12 JAN 25 JAN 26 JAN 26 JAN 27 JAN 27 JAN 27 JAN 27 JAN 28	]		6163	USSR	DE Se	OCT
LAUNCHES    OO1A   COSHOS 471   5764   USSR   12 JAN   25 JAN   OO1E   5767   USSR   12 JAN   25 JAN   OO1E   5767   USSR   12 JAN   25 JAN   OO1E   5767   USSR   12 JAN   25 JAN   OO1E   5767   USSR   12 JAN   24 JAN   OO1E   5767   USSR   12 JAN   24 JAN   OO1E   5767   USSR   12 JAN   24 JAN   OO1E   5767   USSR   12 JAN   24 JAN   OO1E   5767   USSR   12 JAN   24 JAN   OO1E   OO1E   5767   USSR   12 JAN   24 JAN   OO1E	l		9800	USSR	30	APR
OOI A   COSMOS 471   5764   USSR   12 JAN   25 JAN   OOI B   5775   USSR   12 JAN   25 JAN   OOI B   5775   USSR   12 JAN   15 JAN   OOI B   5775   USSR   12 JAN   15 JAN   OOI B   5775   USSR   12 JAN   15 JAN   OOI B   5776   USSR   12 JAN   27 JAN   OOI B   5776   USSR   12 JAN   27 JAN   OOI B   5776   USSR   12 JAN   27 JAN   OOI B   5776   USSR   12 JAN   27 JAN   OOI B   5776   USSR   12 JAN   27 JAN   OOI B	12	ES				
NOTIC   1777   USSR   12 JAN   29 JAN   10 JAN			5764	USSR		NAV
OOT   OOT			5767	USSR		Z A
ORTIF   SOLUTION   SOlution   Solution   S	· I		5774	UŠSR		ر م A X
OCT   OCT	- 1		5006	USSR		d ≹
1002B   5770   US 20 JAN 23 JAN 2002B   5771   US 20 JAN 23 JAN 2002B   5771   US 20 JAN 23 JAN 27 JAN 2002B   5772   US 20 JAN 27 JAN 28 JAN 27 JAN 27 JAN 28 JAN 27 JAN 28 JA	ſ		2189	USSR		JAN
NUMBER   N			5770	S		NAC
004B         COSMOS 472         5805         USSR         25 JAN         6 MAY           005B         5815         USSR         25 JAN         6 MAY           005B         5815         US         31 JAN         27 SEP           005B         5818         US         31 JAN         27 SEP           005B         5838         USSR         3 FEB         15 FEB           005B         5835         USSR         14 FEB         11 FEB           007C         5838         USSR         14 FEB         25 FEB           007E         5839         USSR         14 FEB         27 FEB           007E         5839         USSR         14 FEB         27 FEB           007E         5848         USSR         14 FEB         27 FEB           007E         5850         USSR         14 FEB         27 FEB           007E			5772	US CO		A S
NEDS-RED   Sept   Sep		211 COMCDO	5805	USSR		HAY
OOSE   OOSE	i	HE U3-AZ	5815	US		7 SEP
005E         COSMOS 473         5821         USSR         31 JAN         2 5EB           006B         COSMOS 473         5821         USSR         3 FEB         11 FEB           007A         LUNA 20         5835         USSR         14 FEB         25 FEB           007D         5838         USSR         14 FEB         17 FEB           007E         5839         USSR         14 FEB         17 FEB           008A         COSMOS 474         5839         USSR         16 FEB         21 FEB           008B         USSR         16 FEB         29 FEB           008B         USSR         16 FEB         29 FEB           008B         USSR         16 FEB         29 FEB           008B         USSR         16 FEB         29 FEB           012C         5850         USSR         16 FEB         29 FEB           012C         5878         USSR         16 FEB         29 FEB           013C         5863         USSR         16 FEB         29 FEB           013C         5863         USSR         16 FEB         29 FEB           013C         5863         USSR         16 FEB         29 FEB           013C	- 1		5818 5817	S. 68	•	NOC
007A         LUNA 20         5022         005R         14 FEB         25 FEB           007D         5835         USSR         14 FEB         17 FEB           007D         583B         USSR         14 FEB         17 FEB           007D         584B         USSR         14 FEB         21 FEB           007D         584B         USSR         14 FEB         21 FEB           007D         584B         USSR         16 FEB         21 FEB           008A         COSMOS 474         584B         USSR         16 FEB         29 FEB           008B         584B         USSR         16 FEB         29 FEB           008B         584B         USSR         16 FEB         29 FEB           008B         5850         USSR         16 FEB         29 FEB           008B         587B         USSR         16 FEB         29 FEB           012C         587B         USSR         16 FEB         1 MAR           013C         587B         USSR         16 FEB         29 FEB           013C         587B         USSR         16 FEB         1 MAR           013C         587B         USSR         16 FEB         1 MAR	1	47	5821	USSR		FEB
00770     5837     USSR     14 FEB     17 FEB       00771     5838     USSR     14 FEB     21 FEB       00772     5841     USSR     14 FEB     21 FEB       00773     5849     USSR     16 FEB     29 FEB       0088     COSMOS 474     5849     USSR     16 FEB     23 FEB       0080     5849     USSR     16 FEB     29 FEB       0080     5850     USSR     16 FEB     28 FEB       0081     5850     USSR     16 FEB     1 MAR       010C     5878     USSR     16 FEB     1 MAR       012C     5863     USSR     1 MAR     16 MAR       013B     COSMOS 477     5863     USSR     4 MAR     16 MAR       013B     COSMOS 477     5863     USSR     4 MAR     16 MAR       013B     COSMOS 477     5863     USSR     4 MAR     16 MAR       013B     COSMOS 477     5864     USSR     4 MAR     5 MAR       013B     COSMOS 477     5865     USSR     4 MAR     5 MAR       013B     COSMOS 477     5865     USSR     4 MAR     5 MAR       013B     COSMOS 477     5866     USSR     4 MAR     5 MAR		2	2835	USSR		FEB
007E         5041         USSR         14 FEB         21 FEB           008A         CDSMDS 474         5839         USSR         16 FEB         29 FEB           008B         USSR         16 FEB         23 FEB           008B         USSR         16 FEB         29 FEB           008E         5850         USSR         16 FEB         29 FEB           010C         58578         USSR         16 FEB         20 FEB           012C         5878         USSR         1 MAR         3 MAR           013B         COSMDS 477         5863         USSR         4 MAR         10 MAR           013B         SAAR         5863         USSR         4 MAR         5 MAR           013B         SAAR         5 MAR         5 MAR         5 MAR         5 MAR           013B         SAAR         5 MAR         5 MAR         5 MAR         5 MAR         5 MAR	- 1		5837 5838	USSR		FEB
10   10   10   10   10   10   10   10		67	5841	USSR		
008C       5848       USSR       16 FEB       29 FEB         008B       5849       USSR       16 FEB       20 FEB         008E       5850       USSR       16 FEB       1 MAR         010C       5055       USSR       1 MAR       18 AUG         012C       5862       USSR       4 MAR       16 MAR         013A       C05MUS +77       5863       USSR       4 MAR       10 MAR         013C       5864       USSR       4 MAR       5 MAR         013C       5864       USSR       4 MAR       5 MAR         013C       5864       USSR       4 MAR       5 MAR         013C       5865       USSR       4 MAR       5 MAR	- 1		5840	USSR		4
OOBE     5850     USSR     16 FEB     1 MAR       010C     5855     US     1 MAR     3 MAR       012C     5878     US     3 MAR     18 AUG       013A     C05MBS 477     5863     USSR     4 MAR     16 MAR       013C     5864     USSR     4 MAR     5 MAR       013C     5865     USSR     4 MAR     5 MAR       013C     5865     USSR     4 MAR     5 MAR       013C     5865     USSR     4 MAR     5 MAR       013C     5865     USSR     4 MAR     5 MAR       013C     5865     USSR     4 MAR     5 MAR			5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	USSR		7 TO 1
012C 5878 US 3 MAR 18 AUG 012C 5878 US 3 MAR 16 MAR 10 MAR 10 MAR 10 MAR 10 MAR 10 MAR 10 MAR 10 MAR 10 MAR 10 MAR 10 MAR 11 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 11 MAR 5 MAR 11 MA			5850	USSR		MAT A
012C 5062 5062 USSR 4 MAR 10 MAR 10 MAR 10 MAR 10 MAR 10 MAR 10 MAR 10 MAR 10 MAR 10 MAR 10 MAR 5 MAR 5 MAR 5 MAR 5 MAR 11 MAR 5 MAR 5 MAR 11 MAR 5 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11 MAR 5 MAR 11	- 1		5075			\$ \$
C138 5863 USSR 4 MAR 10 MAR 013C 5864 USSR 4 MAR 5 MAR 013D 5865 USSR 4 MAR 5 MAR	1	COSMOS 477	5862	USSR	1	2 6
0130 5865 USSR 4 MAR 5 MAR			5863	USSR	-	HAR
	- 1		5865	USSR	4 MAR	MAR

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NAT TOWAL		CATA1 0C				
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1972 LAUNCHES	s (cont.)					
ı		5883	USSR	1 .	17 MAR 72	
1972 0144	TD=14	5879	E 580		NA S	
- 1		388U 5881	US		9 OCT 80	
		5884	ESRO	12 MAR		
1	!	5932	ESRO		130	
1972 UISA 1972 UISA	CUSMUS 478	5885	USSR	15 MAR	28 MAR 72	
		5887	USSR	15 MAR		
1		5909	USSR		MAR	
1972 015E		5910	USSR	15 HAR	MAR	
		5888	SD	1	11 APR 72	
	COSMOS 479	5894	9330	22 WAR	9	
		5895	USSR		HAY	
1		5901	USSR		À	
1972 0170		5902	USSR			
	COSMOS 481	5906	USSR	1	2 SED 72	
		5903	83311		3	
1972 U21A	VENERA 8	5912	USSR		3	*
1972 0216		4103	2330		MAR	
0.234	COSMOS 482	5914	USSK	27 MAR	29 MAR 72	
023B		5920	USSP	31 MAR	APR	
		5921	USSR	- 1	4	
1972 0230	COCMOC. 483	5923	CSSR	31 MAR		
	- Col course	5925	USSR	3 APR	V P	
- 1		5926	USSR	- 1	APR	
1972 0240		5943	USSR	3 APR	19 APR 72	
025A	MOLNIYA 1-20	5927	USSR	4 APR	NA	
0258	SRET 1	5928	FRANCE	A APR	4	
1972 0250		5929	USSR	4 APR		
1		5931	8551	A A D P	10 ADP 72	
•		5035	855H	001		
0256		5940	USSR	4 APR	HAR	
U26A	COSMOS 484	5933	USSR	ł	A PR	
1972 0268		5934	USSR	APR	A PR	
027A	INTERCOSMOS 6	5936	USSR	7 APR	11 APR 72	
0278		5927	USSR	- 1	APR	
U28A	COSMOS 485	5938	USSR		AUG	
1972 0288		5042	1558	X44 11	*	
- 1		5946	033K	- }		
		5949	U 00 00			

DECAYED UBJECTS

DOLLO COSMOS 486   5945   USSR   14 APR   27 A	DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
October   Octo	1972 LAUNCHE	(CONT.					
1940   1940   1941	72		5945	USSR		A PR	
03000 0010 0010 0059 14 APR 27	- 1		5948	USSR	7	APR	
1314   APOLLO 16   CONTO 16   C			6011	USSR	• 🗢 🛉	APR	
Color   Colo	- 1	Ŧ	0000	US		A PR	#L
Color   Colo	- 1	APOLLO 16	6009	Sn	09	3	÷.
Deciding   County		SUBSATELLITE	62022	US	- 1	YAH	
1934   COSHOS 488	- 1	COMCO TOT	6007	USSR		ا ا	
Day of the color	ŀ	1	6016	USSR		3	
1946   6024   6025   6024   6025   6024   6025   6024   6025   6024   6025   6024   6025   6024   6025   6024   6025   6024   6025   6024   6025   6024   6025   6024   6025   6024   6025   6024   6025	~ N		6018	USSR		¥	
Day   Day	- 1		6024	USSR	1	HA!	
COSMOS 490   COS	1		6026	USSR		4	
Date   Date			6021	USSR		A A	
1976   HOLNIYA 2-2   6031   USSR   19 HAY   22 HAR   60370   USSR   19 HAY   23 HAR   60370   USSR   19 HAY   9 JUN   19 JUN   6039   USSR   19 HAY   9 JUN   60370   USSR   19 HAY   9 JUN   60370   USSR   19 HAY   19 JUN   19	, <b>~</b> r		6039	USSR		MAY	10
0.37C     0.020	1	2-	6031	USSR	1	HAR	
10376   10376   10377   10377   10377   10377   10377   10377   10377   10377   10377   10377   10377   10377   10377   10384   10377   10384   10377   10384   10377   10384   10377   10384   10377   10384   10387   1038			6029	USSR		NO.	100
0376     6034     USSR     19 MAY     1 JUN       038B     6036     USSR     25 MAY     8 JUN       038B     6036     USSR     25 MAY     30 MAY       038B     6036     USSR     25 MAY     30 MAY       038B     6046     USSR     25 MAY     29 MAY       038F     6047     USSR     25 MAY     11 JUN       039A     6049     USSR     25 MAY     10 JUN       040A     COSMOS 492     6059     USSR     9 JUN     24 JUN       040B     6059     USSR     9 JUN     24 JUN       040B     6059     USSR     9 JUN     27 JUN       040B     6059     USSR     9 JUN     27 JUN       040B     6059     USSR     9 JUN     27 JUN       040B     6059     USSR     9 JUN     27 JUN       040B     6059     USSR     9 JUN     27 JUN       040B     6059     USSR     9 JUN     27 JUN       040B     6059     USSR     9 JUN     27 JUN       040B     6059     USSR     9 JUN     27 JUN       040B     6059     USSR     21 JUN     23 JUN       040B     6059     USSR     2			6032	USSR	- 1	₹\$	<b>.</b>
COUNTY   C		COCHOC 101	6034	USSR		J.	1 <b>4</b> 0
Color   Colo		C031903 471	6036	USSR		Y S	
038F     038F     6048     USSR     25 MAY     10 UN       039A     6037     6037     USSR     25 MAY     10 UN       040A     COSMOS 492     6049     USSR     9 JUN     22 JUN       040B     040C     6059     USSR     9 JUN     24 JUN       040B     040B     0557     USSR     9 JUN     27 JUN       040B     6054     USSR     9 JUN     27 JUN       040B     6053     USSR     21 JUN     27 JUN       042B     6054     USSR     21 JUN     25 JUN       042B     6054     USSR     21 JUN     25 JUN       042B     6054     USSR     21 JUN     23 JUN       042B     6054     USSR     21 JUN     23 JUN       042B     6054     USSR     21 JUN     23 JUN       042B     6054     USSR     21 JUN     23 JUN       042B     6054     USSR     21 JUN     23 JUN       042B     6054     USSR     21 JUN     23 JUN       042B     6054     USSR     21 JUN     23 JUN	f		6046	USSR	1	NO.	
039A   039A   037   05   25 MAY   040A   040A   040B   056   056   056   055R   9 JUN   27 JUN   040B   040B   057   0			6048	USSR		Š	
040B     6050     USSR     9 JUN     24 JUN       040C     6055     USSR     9 JUN     24 JUN       040B     6057     USSR     9 JUN     27 JUN       040B     6057     USSR     9 JUN     27 JUN       042B     6054     USSR     21 JUN     3 JUN       042B     6054     USSR     21 JUN     23 JUN       042C     6056     USSR     21 JUN     23 JUN       042C     6056     USSR     21 JUN     23 JUN       042B     6056     USSR     21 JUN     23 JUN       042C     6056     USSR     21 JUN     23 JUN       042B     6056     USSR     21 JUN     23 JUN	- 1	OSMOS 49	6049	USSR	- 1	Ž Š	
040C 0057 055R 7 JUN 27 JUN 040E 055R 9 JUN 27 JUN 040E 055R 9 JUN 27 JUN 040E 055R 9 JUN 27 JUN 042B 055R 21 JUN 25 JUN 042B 055R 21 JUN 25 JUN 042C 6056 055C 055R 21 JUN 23 JUN 042C 6056 055C 055C 055C 055C 055C 055C 055	- 1		6050	USSR	- [	<b>\$</b>	
040E 6064 USSR 9 JUN 27 JUN 642A COSMOS 493 6054 USSR 21 JUN 25 JUN 642C 6056 6162 USSR 21 JUN 23 JUN 6162 USSR 21 JUN 23 JUN 6162 USSR 21 JUN 23 JUN 6162 USSR 21 JUN 23 JUN 6162 USSR 21 JUN 23 JUN 6162 USSR 21 JUN 23 JUN 6162 USSR 21 JUN 23 JUN 6162 USSR 21 JUN 23 JUN 6162 USSR 21 JUN 6162 USSR 6162 USSR 6162	1		6057	0558	1	<b>₽</b>	
0428 003103 493 6053 0058 21 JUN 25 JUN 25 JUN 25 JUN 25 JUN 27 J			6064	USSR		Z	
042C		CU37U3 493	6054	USSR		ک و	
	- 1		6162	USSR	- 1	H C	

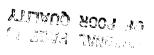
Inches   Name	MATIONAL			CATAL 06				
Control   Cont	DESIGNATION	Z	AME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
0445         0562         USSR         23 JUN         29 JUN		(CONT						
01410	972			6062	USSR		NOS I	
0455 COSMUS 496 COSMUS	1			609	USSR	ŀ	3	
0456 COSMOS 4095 COSMOS	216			9909	USSR		<b># #</b>	
Colored   Colo	1			6067	USSR	1	7	
0466         0469         USSR         29 JUN         1 MG           0466         0401         USSR         29 JUN         1 MG           0446         0401         USSR         29 JUN         1 MG           0446         0401         USSR         29 JUN         1 MG           0416         0401         USSR         29 JUN         1 MG           0417         0401         USSR         20 JUN         1 JUN           0402         0501         USSR         20 JUN         1 JUN           0403         0502         USSR         20 JUN         1 JUN           0504         0503         USSR         20 JUN         1 JUN           0504         0504         USSR         5 JUN         1 JUN           0504         0504         USSR         6 JUN         1 JUN           0505         0504         USSR         6 JUN         1 JUN           0505         0504         USSR         6 JUN         1 JUN           0505         0505         USSR         6 JUN         1 JUN           0505         0505         USSR         6 JUN         1 JUN           0505         0505         USSR	- 1	PRJCN02 2		8909	H3SN	- 1	9	
0476         0471         USSR         29 JUN         19 JUN           0476         0471         USSR         30 JUN         19 JUN           0472         0472         USSR         30 JUN         19 JUN           0473         0471         USSR         30 JUN         17 RIV           0486         0477         USSR         5 JUL         17 RIV           0487         0470         USSR         5 JUL         17 RIV           0488         0470         USSR         5 JUL         17 RIV           0489         0490         USSR         6 JUL         17 JUL         28 JUL           0489         0490         USSR         6 JUL         17 JUL         28 JUL           0510         050         USSR         0 JUL         17 JUL         28 JUL				6909	USSR		AUG 7	
04.76         LUSSR         3.0 JUN         5 D JUN         5 D JUN         5 D JUN         5 D JUN         5 D JUN         5 D JUN         5 D JUN         5 D JUN         5 D JUN         1 J SER         3.0 JUN         1 J SER         3.0 JUN         1 J SER         3.0 JUN         1 J JUN         2 J JUN         1 J JUN         2 J JUN         1 J JUN         2 J JUN         1 J JUN         3 JUN         <	1			6071	USSR		JUL 7	
0478         6081         USSR         30 JUN         13 SEP           0486         6081         USSR         30 JUN         1 MR           0486         6086         USSR         30 JUN         1 MR           0486         6086         USSR         30 JUN         1 MR           0486         6086         USSR         30 JUN         1 MR           0504         USSR         5 JUL         25 JUL         25 JUL           0510         USSR         6 JUL         11 JUL         1 JUL           0511         USSR         6 JUL         11 JUL         1 JUL           0512         USSR         6 JUL         10 JUL         1 JUL           0512         USSR         6 JUL         10 JUL         1 JUL           0512         USSR         6 JUL         10 JUL         1 JUL           0512         USSR         6 JUL         10 JUL         1 JUL           0520         USSR         6 JUL         10 JUL         2 JUL           0520         USSR         1 JUL         1 JUL         1 JUL           0520         USSR         1 JUL         1 JUL         1 JUL           0520         USSR	1		7	6075	USSR		12	
0518         COSMUS         1935         30 JUN         17 MR           0508         COST         USSR         30 JUN         17 MR           0508         COSMUS         1958         30 JUN         17 MR           0509         COSMUS         1958         5 JUL         25 SIR           0504         COSMUS         1958         6 JUL         17 JUL           0510         COSMUS         1958         6 JUL         17 JUL           0511         COSMUS         1958         6 JUL         17 JUL           0512         COSMUS         1958         6 JUL         10 JUL           0514         COSMUS         1958         6 JUL         10 JUL           0516         COSMUS         1958         6 JUL         10 JUL           052         COSMUS         10 JUL         10 JUL         10 JUL           052         COSMUS         10 JUL         10 JUL         10 JUL           052         COSMUS         10 JUL         10 JUL         10 JUL           053         COSMUS         10 JUL         10 JUL         10 JUL           054         COSMUS         10 JUL         10 JUL         10 JUL           054 </td <td></td> <td></td> <td></td> <td>6078</td> <td>USSR</td> <td>1</td> <td></td> <td></td>				6078	USSR	1		
0.08 G         0.00 G         0.00 G<		COSMUS 497		6076	USSR-		7 ADX	
050 A         COSMOS 498         6086         USSR         5 JUL         25 NOV           051 A         COSMOS 499         6080         USSR         6 JUL         17 JUL           051 A         6091         USSR         6 JUL         17 JUL           051 C         6092         USSR         6 JUL         10 JUL           051 C         6092         USSR         6 JUL         10 JUL           052 B         6095         USSR         10 JUL         19 JUL           052 B         6095         USSR         10 JUL         19 JUL           053 E         6101         USSR         10 JUL         19 JUL           054 C         6101         USSR         10 JUL         19 JUL           054 C         6101         USSR         10 JUL         19 JUL           054 C         6104         USSR         10 JUL         19 JUL           054 C         6104         USSR         10 JUL         19 JUL </td <td></td> <td></td> <td></td> <td>6077</td> <td>USSR</td> <td></td> <td>MAR 7</td> <td></td>				6077	USSR		MAR 7	
0510         COSMUS 499         6090         USSR         6 JUL         17 JUL           0510         6092         USSR         6 JUL         10 JUL           0510         6113         USSR         6 JUL         10 JUL           0510         6113         USSR         6 JUL         10 JUL           0522         6094         USSR         6 JUL         10 JUL           0522         6095         USSR         10 JUL         20 JUL           0523         6096         USSR         10 JUL         21 JUL           0530         0530         USSR         10 JUL         21 JUL           0531         0532         USSR         10 JUL         21 JUL           0532         0533         USSR         10 JUL         21 JUL           0534         0536         USSR         10 JUL         23 JUL           054         055         USSR         10 JUL         27 JUL           054         054         USSR         10 JUL         28 JUL           054         054         USSR         12 JUL         27 JUL           054         054         054         054         054           054 <td< td=""><td></td><td>1</td><td></td><td>6086</td><td>USSR</td><td></td><td>NON S</td><td></td></td<>		1		6086	USSR		NON S	
0518         6 JUL         10 JUL         10 JUL         10 JUL         10 JUL         10 JUL         10 JUL         10 JUL         10 JUL         10 JUL         20 JUL         20 JUL         20 JUL         20 JUL         20 JUL         20 JUL         20 JUL         20 JUL         20 JUL         20 JUL         20 JUL         20 JUL         20 JUL         20 JUL         20 JUL         20 JUL         20 JUL         20 JUL         20 JUL         30 JUL <td>1</td> <td>1</td> <td></td> <td>0609</td> <td>USSR</td> <td>ı</td> <td>3</td> <td></td>	1	1		0609	USSR	ı	3	
051B         USSR         6 JUL         20 JUL           052B         6095         USSR         6 JUL         20 JUL           052B         6095         USSR         7 JUL         9 JUL           052B         6096         USSR         10 JUL         29 MAR           053A         6101         USSR         10 JUL         29 MAR           053C         6103         USSR         10 JUL         29 MAR           053E         6103         USSR         12 JUL         31 MA           054A         COSMUS 501         6103         USSR         12 JUL         9 MA           054B         6103         USSR         12 JUL         9 MA           054C         6103         USSR         12 JUL         3 JUL         7 AUG           054C         6103         USSR         12 JUL         3 JUL         4 JUL           054C         6103         USSR         12 JUL         3 JUL         4 JUL </td <td>1</td> <td></td> <td></td> <td>6092</td> <td>USSR</td> <td>1</td> <td>₹ 5</td> <td>•</td>	1			6092	USSR	1	₹ 5	•
0524         0524         0524         052         045         046         045         045         045<	1			6113	USSR	1	33	
USSR         LUSSR         10 JUL         29 MAR           USSA         USSR         10 JUL         27 MAR           USSR         12 JUL         9 MAY           USSR         12 JUL         7 AUG           USSR         12 JUL         25 JUL           USSR         13 JUL				5609 5609	Sn	7 JUL	3	ŧ
053B         USSR         10 JUL         25 APR           053C         6101         USSR         10 JUL         25 APR           053B         6101         USSR         10 JUL         15 APR           053B         6104         USSR         10 JUL         15 APR           054A         USSR         12 JUL         10 JUL         14 APR           054B         USSR         12 JUL         12 JUL         14 AUG           054B         USSR         12 JUL         15 JUL         15 JUL         15 JUL         25 JUL           054J         USSR         12 JUL         25 JUL         25 JUL         25 JUL         25 JUL         25 JUL         25 JUL         25 JUL         25 JUL         25 JUL         25 JUL         25 JUL         25 JUL         25 JUL         25 JUL         25 JUL         25 JUL         25 JUL         25 JUL         25 JUL	1			609,	USSR	ł	MAR	ı
0530         UESR         10 JUN         29 MAR           053E         6164         USSR         10 JUN         29 MAR           053E         6164         USSR         10 JUL         14 MAR           054A         COSMOS 501         6109         USSR         12 JUL         10 JUN           054C         6103         USSR         12 JUL         5 SEP           054C         6103         USSR         12 JUL         7 AUG           054E         6103         USSR         12 JUL         7 AUG           054C         6107         USSR         12 JUL         7 AUG           054G         6109         USSR         12 JUL         25 JUL           054G         6109         USSR         12 JUL         25 JUL           054G         6109         USSR         12 JUL         25 JUL           055A         6109         USSR         12 JUL         25 JUL           055G         6109         USSR         12 JUL         25 JUL           055G         6106         USSR         13 JUL         25 JUL           055G         6106         USSR         13 JUL         25 JUL           055G         6129				6098 6101	USSR	1	A A B	i
053F         COSMUS 501         COSMUS 502         COSMUS 502         COSMUS 503         COSMUS 503 <td></td> <td></td> <td></td> <td>6164</td> <td>USSR</td> <td>ł</td> <td>MAR</td> <td>ì</td>				6164	USSR	ł	MAR	ì
0540         0550         12 JUL         5 SEP           0540         0550         12 JUL         3 SEP           0540         0550         12 JUL         3 MUC           0540         0550         12 JUL         7 AUG           0541         0550         12 JUL         25 JUL           0541         0550         12 JUL         25 JUL           0543         0550         12 JUL         25 JUL           0554         0550         12 JUL         25 JUL           0550         0550         13 JUL         18 JUL           0550         0106         0550         13 JUL         15 JUL           0550         0106         0550         13 JUL         15 JUL           0550         0111         0550         13 JUL         15 JUL           0550         0129         0550         13 JUL         25 JUL           0550         0129         0550         13 JUL         25 JUL           0550         0129         0550         13 JUL         25 JUL           0550         0129         0550         13 JUL         14 JUL           0550         0550         0550         15 JUL         15 JUL<		•		6609	USSR	1	¥	ì
054E         6107         USSR         12 JUL         7 AUG           054E         6109         USSR         12 JUL         7 AUG           054G         055R         12 JUL         25 JUL         25 JUL           054J         0109         USSR         12 JUL         25 JUL           055A         055B         12 JUL         18 SEP           055B         0106         USSR         13 JUL         18 JUL           055C         0106         USSR         13 JUL         15 JUL           055D         0128         USSR         13 JUL         15 JUL           055D         045E         USSR         13 JUL         25 JUL           055D         045E         USSR         13 JUL         25 JUL           055D         045E         USSR         13 JUL         26 JUL           055D         045E         USSR         13 JUL         14 JUL	1			6103	USSR	1	SEP.	1
054F         USSR         12 JUL         25 JUL           0546         0546         055R         12 JUL         25 JUL           0546         0546         055R         12 JUL         25 JUL           0540         055R         12 JUL         18 SEP           055B         055B         13 JUL         18 JUL           055C         055C         13 JUL         15 JUL           055C         055C         13 JUL         15 JUL           055C         055C         13 JUL         25 JUL           055C         055C         13 JUL         25 JUL           055C         055C         13 JUL         25 JUL           055C         055C         13 JUL         25 JUL           055C         055C         13 JUL         25 JUL           055C         055C         13 JUL         26 JUL           055C         055C         13 JUL         26 JUL           055C         055C         13 JUL         26 JUL           055C         055C         10 JUL         10 JUL           055C         13 JUL         25 JUL         10 JUL           055C         10 JUL         10 JUL         10 JUL <td>1</td> <td></td> <td></td> <td>6107</td> <td>USSR</td> <td>1</td> <td>AUG 7</td> <td>į</td>	1			6107	USSR	1	AUG 7	į
05411 058R 12 JUL 18 SEP 7 054J 0554J 0554J 0558 12 JUL 18 SEP 7 0554J 0558 13 JUL 25 JUL 26	l			6109	USSR	1	3	į
0556 C05M05 502 6106 USSR 13 JUL 18 JUL 0556 13 JUL 15 JUL 0557 13 JUL 15 JUL 0550 1558 13 JUL 25 JUL 0550 1558 13 JUL 25 JUL 0550 1558 13 JUL 25 JUL 0556 159 USSR 13 JUL 26 JUL 0556 159 USSR 19 JUL 1 AUG	.1.			6133	USSR	ſ	SEP 7	
0550 6128 USSR 13 JUL 25 JUL 7 0550 6550 6550 13 JUL 26 JUL 7 0556 13 JUL 26 JUL 7 0556 13 JUL 26 JUL 7 0556 13 JUL 26 JUL 7 05564 13 JUL 1 AUG 7	.1	<del>CO S WGS - 5 0 2</del>		6106	USSR		3	i
0556 COSMOS 503 6114 USSR 19 JUL 1 AUG 7	1			6128	USSR	_	705	
	- 1	COSMOS 503		6129	USSR		AUG 7	ı

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INTER-					
ION	NAME	NUMBER	SOURCE	LAUNCH	DECAY
1972 LAUNCHES (CONT.)					
1972 056C		6116	USSR	וא יחר	23 JUL 72
i .		6134	USSR		AUG
		7833	US S	- 1	
		7835	US CO	- 1	FEB
		7844	SO	23 JUL 52	25 SEP 81 27 MAR 82
1972 058AE		7858	SO	23 JUL	28 DEC 81
- 1		7860	Sn S	- 1	
ı		7862	US US		11 JUL 80
ı		7864	US S		- 1
		7873	ů. S		DEC
		7883	S S		N
1972 058BC		7886	S OS		Y A
		7891 7891	SO		SEP
		7895 7895	SO	•	2
1 1		7897 7897	S	23 JUL 23 JUL	
		7899	S		23 JUL 81
		7909	ÜS		DEC
		7928	S		YAH
		7932	S	- 1	- 1
		7961	SO	- 1	12 JAN 80
		7973	SS		
		7977	S C S		
		7980	S		FE8
1972 0580D		8002	US S	23 JUL	27 AUG 80
l					

NATIONAL	27447	O LOWING	200103	70014	>1000	MOTE
DESIGNATIUN	NAME	NUMBER	SUURCE	LAUNCH	DECAT	NOIES
1972 LAUNCHES (CONT.)						
		8086	Šn	23 JUL	12 APR 80	
1972 USBOP		8088	ns	23 JUL	Ž	
- 1		8089	Sn Sn	ı	- 1	
		8090	Sn:	23 JUL		
1972 05805		8091	\$ 12 m		18 101 78	
- 1		\$000 \$000	Sn	ı	9	
		8096	Sn		S	
1972 0580Y		5608	Sn Sn	- 1	ADA	
		8098	Si	23 JUL		
		8124	30		2	
		8125	S		12 UCT 75	
1012 0505		0213	311		25 WAD 82	
- 4		8213	50	23 1111		
		8316	Sn	23 JUL	12 MAY 81	
1972 U58EK		8217		ł	- 1	
1972 058EN		8320	Šņ	23 JUL		
		8321	30	Į	80	
		8374	SD:	23 JUL	16 JUN 79	
4		6760	311	1	CO VON CC	
1972 058E1		8311	20	23 JUL 23 JUL	26 NOV 62	
		8379	Sn	i		
- 1		9380		23 JUL	20 MAR 79	
		8381	Sn			
1972 058EY		8382		1		
		8383	S:	23 JUL	9 OCT 79	
1072 058FA		8385	\$II	ì	•	
1		6262	311		16 MM 79	
ŀ		8388	US		S	
		8389	30	ı	19 DEC 80	
		8391	Sn	23 JUL	30 MAR 80	
- 1		8392	Sn	1		
		8393	SO	23 JUL	16 MAK 77	
1		04.33	311	ł	[ "	
		7	<b>5</b> 2	22 111	NAL	
1972 058FR		8496	Sn		_	
- 1		8498	<u> </u>	- [	3 NOV 80	
		8499	SN	23 JUL	_	
1972 C58FV		8500	30	1	\$	
		8501	s:	23 JUL	21 NOV 79	
		8502		1		
		850 S	\$ u	23 JUL 23 JUL	21 MAR 40	
74860 7761		4040	311	1		
			3	100		

NATIONAL DESIGNATION	NAME	CATALOG			
		301012	שטטאנב	LAUNCH	DECAY
1972 LAUNCHES (CONT.)					
1972 05860		8508	SO	23 JUL	24 AUG
		8532	SO	23 JUL 23	- 1
1972 0586J		8534	50	- 1	
		8536	US		
		8540	SO	23 JUL 23 JUL	2 NOV
1972 05865		8543	89		1
1		8543	SO		
		8570	Sn	23 JUL 23 JUL	19 AUG
- 1		0571	5 <del>0</del>	-1	1
1972 05014		8572	SO		
		8574	SO	23 JUL	NOF 91
		8576	Sn Sp	23 JUL	- 1
- 1		8578		ı	1
1972 058HH		8579	ÙS	-	24 JAN
1		8581	SA	23 JUL	8 FEB
1972 058HL		9670	S#	- 1	- 1
1972 058HM		9671	85	ì	
		6496	65	23 JUL	2 JUL
1972 058HR		9675	SS		
		9728	Sn	23 JUL	10 APR
1972 058HW		9729	50 	1	
- 1		9970			
1972 059A COSMOS 512		9972	US ST		_
0598		6131	USSR	28 JUL	1 AUG
		6136	USSR		- 1
1972 060D		6143	USSR	2 AUG	20 AUG
- 1		6144	USSR	1	1
060F		6147	USSR		
0618	č	6145	SO	13 AUG	5 MAR
0610		6146	SA		1
1972 0638 COSMOS 515		6150	USSR	_	
		6165	USSR	18 AUG	23 AUG 72 3 SEP 72
717		6166	USSR	- 1	1



UNIVERS COINT.   NAME   NUMBER   SOURCE   LAUNCHES COINT.     USAB	1 ( 10 1 1		WRINCOS				
LAUNCHES (CONT.)         6332         JAPAN         19           0646         6196         USSR         21           0656         6196         USSR         21           0656         6196         USSR         21           0656         6196         USSR         21           0674         COSMUS 518         6189         USSR         21           0670         6196         USSR         19           0710         6189         USSR         15           0710         6199         USSR         15           0710         6200         USSR         15           0710         6720         USSR         15           0730         0730         USSR         15 <trr< th=""><th>1 1</th><th>NAME</th><th>NUMBER</th><th>SDURCE</th><th>LAUNCH</th><th>DECAY</th><th>_</th></trr<>	1 1	NAME	NUMBER	SDURCE	LAUNCH	DECAY	_
Ubekin         CH350         JAPAN         19           Ubekin         CH360         USSR         21           Ubekin         CH360         USSR         21           Ubekin         CH370         USSR         21           Ubekin         USSR         21           Ubekin         USSR         21           Ubekin         USSR         21           Ubekin         USSR         15           Ubekin         USSR         15 </td <td>972</td> <td>(CONT</td> <td></td> <td></td> <td></td> <td></td> <td></td>	972	(CONT					
0.65 E         6196         USSR         21           0.65 C         6196         USSR         21           0.67 C         6119         USSR         30           0.67 C         6110         USSR         30           0.68 C         6110         USSR         30           0.68 C         6110         USSR         15           0.70 A         6120         USSR         15           0.71 B         6120         USSR         15           0.71 B         6120         USSR         15           0.72 B         6120         USSR         15           0.72 B         6120         USSR         15           0.72 B         6120         USSR         16           0.73 B         620         USSR         16           0.74 B         CCSAD         USSR         16           0.75 B         CCSAD         USSR         16           0.75 B         CCSAD         USSR         16	1		6332	JAPAN		28 APR	81
65 C         COSMUS 517         6199         USSR         30           06 7A         COSMUS 517         6168         USSR         30           06 7A         COSMUS 518         6186         USSR         30           0704         COSMUS 518         6186         USSR         15           0706         COSMUS 518         6184         USSR         15           0706         COSMUS 518         6189         USSR         15           0716         COSMUS 528         COSMUS 528         COSMUS 528         16         16           0776         COSMUS 529         COSMUS 529         USSR         16         17           0776         COSMUS 529         COSMUS 529         USSR         16         17           0776         COSMUS 529         COSMUS 529         USSR         16         17           0776         COSMUS 529 <td< td=""><td></td><td></td><td>6196</td><td>USSR</td><td>i</td><td>25 SEP</td><td>l l</td></td<>			6196	USSR	i	25 SEP	l l
0.67A         COSMOS 517         6168         USSR         30           0.67A         COSMOS 518         6110         USSR         30           0.67A         COSMOS 518         6186         USSR         30           0.70A         COSMOS 518         6186         USSR         15           0.70B         COSMOS 518         6189         USSR         15           0.70B         COSMOS 518         6189         USSR         15           0.71B         COSMOS 519         6189         USSR         16           0.71B         COSMOS 520         6200         USSR         19           0.72B         COSMOS 522         6209         USSR         19           0.73B         MBLNITA 2-3         6209         USSR         30           0.74B </td <td>1</td> <td></td> <td>6619</td> <td>USSR</td> <td></td> <td>- 1</td> <td>- 1</td>	1		6619	USSR		- 1	- 1
0.57 C         0.17 C         0.52 R         15 C         17 C         0.52 R         15 C         17 C         0.65 R         16 C         17 C         0.65 R         15 C         17 C         0.65 R         15 C         16 C         17 C         0.65 R         15 C         17 C<		51	6168	USSR		11 SEP	
0.000         COSMOIS 518         6132         USSR         15           0.70A         COSMOIS 518         6186         USSR         15           0.70A         COSMOIS 518         6189         USSR         15           0.70A         COSMOIS 519         6189         USSR         15           0.71B         6189         USSR         16           0.71B         6200         USSR         16           0.71B         6200         USSR         16           0.72B         6203         USSR         19           0.73C         6203         USSR         19           0.73B         6203         USSR         19           0.73C         6203         USSR         19           0.73B         6203         USSR         23           0.73C         6203         USSR         30           0.73C         6203         USSR         4           0.73	1		6170	USSR	l	8 SEP	
0700         CDSMUS 518         6186         USSR         15           0700         CDSMUS 519         6188         USSR         15           0718         6188         USSR         15           0718         6189         USSR         16           0718         6200         USSR         16           0710         6201         USSR         16           072         6193         USSR         16           072         6193         USSR         19           072         6203         USSR         19           073         6203         USSR         23           075         6204         USSR         23           075         6204         USSR         30           075         6204         USSR         4           075         6204         USSR         4           075         6204         USSR         4	- 1		6172	30	- 1	- 1	- 1
0710B         01981         USSR         15           0710B         0189         USSR         15           0710B         025B         USSR         16           0710B         025B         USSR         16           0710B         025B         USSR         16           0710B         027B         0193         USSR         16           0710B         027B         0193         USSR         16           077B         077B         0209         USSR         19           077B         077B         0209         USSR         19           077B         077B         022B         USSR         19           077B         077B         022B         USSR         1           077B         077B         022B         USSR         2           077B         077B         022B         USSR         2			6186	USSR	<b>I</b> O 1	24 SEP	
0710         CDSRMUS 519         USSR         16           0718         6189         USSR         16           0710         6200         USSR         16           0710         6200         USSR         16           0720         USSR         16           0720         USSR         19           0730         6203         USSR         19           0731         6203         USSR         23           0730         6203         USSR         30           0731         6203         USSR         30           0750         6204         USSR         30           0750         6204         USSR         30           0750         6204         USSR         30           0750         6204         USSR         40           0750         6204         USSR         40           0750         6204         USSR <td< td=""><td>1</td><td></td><td>6186</td><td>ACCO</td><td>1</td><td>1</td><td>ı</td></td<>	1		6186	ACCO	1	1	ı
0718         USSR         16           0718         USSR         16           0710         6200         USSR         16           0710         6201         USSR         19           072B         6193         USSR         19           072B         6195         USSR         19           072B         6203         USSR         19           073B         6203         USSR         23           073B         6204         USSR         30           075B         6205         USSR         30           075B         6209         USSR         30           077C         6209         USSR         30           077C         6229         USSR         30           077C         6229         USSR         30           078C         6229         USSR         30           078C         6229         USSR         30           078C         6229         USSR         5           078C         6229         USSR         5           078C         6240         USSR         5           078C         6240         USSR         5			6188	USSR	- 1	26 SEP	- 1
0711C         6200         USSR         16           072B         6201         USSR         19           072B         6195         USSR         19           072B         6202         USSR         19           072B         6203         USSR         19           073B         6203         USSR         23           075B         6209         USSR         30           077C         6209         USSR         30           075B         6209         USSR         30           077C         6209         USSR         30           077C         6209         USSR         30           077C         6209         USSR         30           077C         6209         USSR         40           077C         6229         USSR         40           078C         6229         USSR         40           078C         6229         USSR         5           078C         6229         USSR         5           078C         6229         USSR         5           078C         6249         USSR         5           078C         6249			6189	USSR			72
0.17 to 0.02 to			1619	9335	ļ,	100 41	I
0.72 b         6193         USSR         19           0.72 b         6194         USSR         19           0.72 b         6203         USSR         19           0.73 b         6203         USSR         19           0.73 b         6203         USSR         23           0.73 b         6203         USSR         23           0.73 b         6203         USSR         30           0.75 b         6204         USSR         30           0.75 b         6204         USSR         30           0.75 c         6204         USSR         30           0.75 c         6224         USSR         4           0.78 c         6224         USSR         5           0.78 c         6225         USSR         5           0.78 c         6245         USSR         5           0.78 c         6245         USSR         5 <td< td=""><td>216</td><td></td><td>6200</td><td>USSK</td><td>- 1</td><td></td><td>- 1</td></td<>	216		6200	USSK	- 1		- 1
072C         6194         USSR         19           072D         6203         US         23           073C         6203         US         23           073C         6203         US         23           073E         6203         USSR         30           073E         6209         USSR         30           075G         6209         USSR         30           075G         6209         USSR         30           075G         6209         USSR         30           077C         6219         USSR         4           077C         6239         USSR         4           078C         6239         USSR         5           078C         6225         USSR         5           078C         6229         USSR         5           078C         6239         USSR         5           078C         6249         USSR         5           078C         6249         USSR         5           078C         6249         USSR         5           078L         6249         USSR         5           078L         6249			6193	USSR			72
072D         6195         USSK         13           073E         6203         US         23           073E         6203         US         23           073E         6209         USSR         30           075B         6209         USSR         30           075C         6209         USSR         30           075B         6209         USSR         30           077C         6219         USSR         4           077B         6229         USSR         4           077C         6229         USSR         4           078B         6222         USSR         5           078B         6225         USSR         5           078B         6225         USSR         5           078B         6241         USSR         5           078B         6249	- 1		6194	USSR		ADN S	1
073C         6203         US         23           073E         6204         USSR         23           075B         6209         USSR         30           075C         6209         USSR         30           075C         6209         USSR         30           075C         6229         USSR         4           077A         COSMOS 522         6229         USSR         4           077B         6229         USSR         4           077C         6229         USSR         4           078B         6222         USSR         5           078B         6225         USSR         5           078B         6225         USSR         5           078B         6241         USSR         5           078B         6241         USSR         5           078B         6245         USSR         5           078B			6195	USSR		30 SEP 26 SEB	- 1
073D         US         23           073E         6205         USSR         23           075B         6209         USSR         30           075B         6209         USSR         30           075C         6219         USSR         30           077C         6229         USSR         4           077C         6229         USSR         4           077C         6229         USSR         4           078C         6229         USSR         5           078C         6229         USSR         5           078C         6229         USSR         5           078C         6229         USSR         5           078E         6229         USSR         5           078E         6249         USSR         5           078E         6240         USSR         5           078L         6241         USSR         5           078L         6242         USSR         5           078L         6242         USSR         5           078L         6242         USSR         5           078L         6242         USSR	•		6203	SN			
073E         6205         USSR         23           075B         6209         USSR         30           075B         6209         USSR         30           075C         6219         USSR         30           077A         CDSMDS 522         6239         USSR         4           077A         623B         USSR         4           077B         6229         USSR         4           078C         6223         USSR         5           078C         6225         USSR         5           078C         6229         USSR         5           078C         6224         USSR         5           078C         6229         USSR         5           078C         6240         USSR         5           078C         6241         USSR         5           078C         6241         USSR         5           078L         6244         USSR         5           078L         6244         USSR         5           078L         6244         USSR         5           079L         6244         USSR         10           079L	- 1		6204	<del>\$1</del>		1	Τ.
075B         USSR         30           075B         6303         USSR         30           075D         6303         USSR         30           077A         CDSMDS 522         6219         USSR         4           077C         623B         USSR         4           077C         622B         USSR         5           078B         622B         USSR         5           078C         622B         USSR         5           078B         622B         USSR         5           078B         622B         USSR         5           078B         622B         USSR         5           078B         624B         USSR         11           079B         622B         USSR         11           079B         622B			6205	US		26 SEP	24
075C         C211         USSR         30           075D         6303         USSR         30           071A         CDSMOS 522         6239         USSR         4           077C         6238         USSR         4           077C         6239         USSR         4           078A         6222         USSR         5           078B         6225         USSR         5           078C         6226         USSR         5           078C         6226         USSR         5           078E         6239         USSR         5           078E         6239         USSR         5           078E         6240         USSR         5           078F         6241         USSR         5           078J         6243         USSR         5           078J         6243         USSR         5           078J         6245         USSR         5           078J         6245         USSR         5           078J         6245         USSR         5           079A         USSR         USSR         10           080A		TOTAL C 3	6209	USSR			
0750         6303         USSR         30           076E         6224         USSR         4           077A         CDSMOS 522         6219         USSR         4           077C         6229         USSR         4           078C         6229         USSR         5           078D         6225         USSR         5           078C         6226         USSR         5           078D         USSR         5           078D         USSR         5           078L         USSR         5           079L         USSR         10           079L         USSR         11           079B         USSR         11           079B         USSR			6211		1	ı	†
077A         CDSMOS 522         6219         USSR         4           077B         6229         USSR         4           077C         6222         USSR         5           078B         6222         USSR         5           078C         6225         USSR         5           078B         6226         USSR         5           078F         6239         USSR         5           078F         6241         USSR         5           078G         6241         USSR         5           078G         6241         USSR         5           078G         6243         USSR         5           078G         6244         USSR         5           078J         6244         USSR         5           078J         6245         USSR         5           078J         6245         USSR         5           078J         6245         USSR         5           079B         6227         USSR         11           079B         6227         USSR         11           079B         6229         USSR         11           079B			6303	USSR		21 FEB	
0770         6220         USSR         4           0770         6238         USSR         5           0784         6222         USSR         5           0784         6225         USSR         5           0786         6225         USSR         5           0786         6239         USSR         5           0786         6239         USSR         5           0786         6241         USSR         5           0786         6242         USSR         5           0787         6242         USSR         5           0784         6243         USSR         5           0786         6245         USSR         5           0786         6245         USSR         5           0794         6245         USSR         5           0794         6227         USSR         10           0794         6229         USSR         11           0794         6229         USSR         11           0794         6229         USSR         11           0794         6229         USSR         11           0794         6229 <t< td=""><td>1</td><td></td><td>6219</td><td>USSR</td><td>100</td><td></td><td></td></t<>	1		6219	USSR	100		
0710         USSR         5           0784         USSR         5           0784         USSR         5           0784         USSR         5           0785         USSR         5           0785         USSR         5           0786         USSR         5           0787         USSR         5           0786         USSR         5           0787         USSR         5           0784         USSR         5           0784         USSR         5           0785         USSR         5           0786         USSR         5           0787         USSR         5           0786         USSR         5           0787         USSR         5           0798         USSR         5           0794         USSR         10           0796         USSR         11           0798         USSR         11 <td>1</td> <td></td> <td>6220</td> <td>USSR</td> <td>4 0CT</td> <td>24 OCT</td> <td>1</td>	1		6220	USSR	4 0CT	24 OCT	1
078A         COSMOS 523         6222         USSR         5           078B         6225         USSR         5           078C         6226         USSR         5           078B         6239         USSR         5           078F         6240         USSR         5           078F         6241         USSR         5           078H         6242         USSR         5           078J         6243         USSR         5           078L         6245         USSR         5           078L         6245         USSR         5           078L         6245         USSR         5           079L         6245         USSR         5           079B         6227         USSR         10           079B         6229         USSR         11           079B         6227         USSR         11           079B         6229         USSR         11           080A         COSMUS 524         6229         USSR         11	. 1		6243	USSA	136	•	-1
078C         0225         USSR         5           078E         6239         USSR         5           078E         6240         USSR         5           078F         6241         USSR         5           078G         6241         USSR         5           078H         6242         USSR         5           078L         6243         USSR         5           078L         6244         USSR         5           078L         6244         USSR         5           078L         6244         USSR         5           078L         6244         USSR         5           079L         079L         USSR         5           079B         6227         USSR         10           079B         USSR         11		52	6222	USSR	1	7 MAR 7 DEC	52
0780         USSR         5           0786         USSR         5           0787         USSR         5           0786         6241         USSR         5           0784         USSR         5           0794         USSR         10           0794         USSR         10           0804         COSMUS 524         6227         USSR         11           0804         USSR         11         11	J		6225	USSR	5 001		
078E         6239         USSR         5           078F         6240         USSR         5           078G         6241         USSR         5           078J         078J         USSR         5           078J         6242         USSR         5           078J         6244         USSR         5           078L         6245         USSR         5           078L         052R         052R         5           079L         052R         USSR         5           079B         6227         USSR         10           060A         COSMUS 524         6227         USSR         11           060A         COSMUS 524         6229         USSR         11	- 1		6226	USSR	-	ı	
078F       078G     6241     USSR     5       078H     6242     USSR     5       078J     6243     USSR     5       078J     6245     USSR     5       078L     6245     USSR     5       078L     6245     USSR     5       078L     052R     10     10       079L     USSR     10       079L     USSR     10       080A     COSMUS 524     6229     USSR     11       080A     USSR     11     11			6239	USSR		17 NOV	
6242     USSR     5       078J     6243     USSR     5       078J     USSR     5       078L     USSR     5       078L     USSR     5       078L     USSR     5       078L     USSR     5       079L     USSR     5       079L     USSR     10       0227     USSR     11       080A     COSMUS 524     6229     USSR     11       080A     USSR     11     11	ı		6241	USSR	t		
078J     6243     USSR     5       078K     6244     USSR     5       078L     USSR     5       078L     USSR     5       078L     USSR     5       079A     6227     US     10       040B     6228     US     10       080A     COSMUS 524     6229     USSR     11       050A     USSR     11     11	- 1		6242	USSR	1	ı	1
078K     078K       078L     05245     055R     5       078L     05245     055R     5       079M     6227     05     10       080A     C0SMUS 524     6229     05       080A     C0SMUS 524     6229     05			6243	USSR		19 OCT	72
079H 079A 079B 079B 080A COSMUS 524 6229 080A COSMUS 524 6229 080A			6244	USSR	1		
0794 0794 0800 0229 0558 10			62%6	USSR	ı	23 951	1
080A COSMUS 524 6229 USSR 11			6227	Sn	0 0	S CAN	
080A CUSMUS 524 6225 USSR 115	- 1	;	6528	83311	1	Į.	<b>-</b>
		52	6229	1558 1558	- 1	20 DEG	7
USSR 14	ı		6231	USSR			_

NATIONAL		CATAL 86			
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DEÇAY
1972 LAUNCHES	(CONT.)				
		6233	USSR	14 OCT	16 NOV 72
1972 081E		6304	11888 11888	\$	- 1
663A	COSMOS 525	6248	USSR	1	29 BCT 72
0838		6249	USSR		
1972 0830		6259	1358 8558	- 1	
0044	605M05 526	6254	9558	20 001	67 007 12
0848		6255	USSR		AN
1972 0868	וזכ כטחכט	6261	ASSO	31 067	13 NOV 72
- 1		6263	USSR	•	
1972 0860		6280	USSR		NO.
086F		6284	USSR	31 OCT	18 NOV 72
0888	CU3HU3 230	6273	USSR	ADN E	19 JUL 80
1972 0880		6700	USSR	J VOV	28 FEB 83
1972 9908 F	EXPLORER 48	6279	58	- 1	<b>*</b>
8160		6800	S		*
1972 092A E	FURU IV	6285	ESRO	22 NOV	15 APR 74
093A	COSMOS 537	6287	USSR	25 NOV	
094 A A C	INTERCOSMOS 8	6291	USSR		1
1972 094C		6293	USSR	AON 06	2 JAN 73
1972 0958	MDENITA 1-22	6294 6295	USSR		11 FEB 76
- 1		6296	W\$58	1	+
1972 0950		6297	USSR	2 DEC	ı
095F		6322	USSR		FE 6
0968	ארטננט זו	1069	Sn	7 DEC	10 DEC 72
0986	MOLNIYA 2-4	6308	USSR		
1972 0986		6309	USSR	12 056	
1		6341	USSR		7 067 74
099A	COSMOS 538	6311	USSR		7 DEC
1972 0990		6314	USSR	14 DEC	18 DEC 72
1		6325	USSR	+	4 42
1972 1994 A	#EROS	6331	USSR	14 DEC	4 JAN 73
1008		6316	SO		FEB

INTER		20 1474.2				
DESIGNATION	NAME	E NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1972 LAUNCHES	HES (CONT.)					
1	C05M05 541	6326	USSR	27 DEC	8 JAN 73	ī
1972 1058 1972 1050		6336	USSR	Ł	JAN	
1972 1050		6338	USSR	27 DEC	12 JAN 73	1
i	CAS SOUD	6342	USSR		9 OCT 83	i
						1
1973 001A	LUNA 21	6333	USSR	NAU 8	1 1	*
	1	6334	USSR	B JAN	13 JAN 73	1
1973 0024	COSMUS 543	6559	USSR	ı	*	1
		6340	USSR	11 JAN	22 JAN 73	1
1973 0026- 1973 0020		6347	USSR		NA	
1	COSMOS 544	6343	USSR	20 JAN	18 MAY 80	,
1973 0036		505	8330		1	1
		6352	USSR	20 JAN	21 MAR 75	1
1973 0048 1973 0048	CUSMUS PAP	6346	USSR		APR	
1973 006A		6354	USSR	1 FEB	FEB	ı
	- 1	9569	USSR	2 558	23 OCT 77	
	MOLNIYA 1-23	0550	455D	ł	3	,
1973 0070		8329	USSR	9 FE8	18 MAR 73	í
1973 0070 1973 007E		6368	USSR	,		ı
	COSMUS 548	6359	USSB	A FER	16 FFB 73	•
		6.260	ASSU.	8 558	6.68	1
1973 008D		2969	USSR	8 FEB	25 FEB 73	
1973 008E		6370	USSR	1	FEB	ı
		6371	8350	15 EEB	22 FEB 73	•
_		6363	N550	1	¥ ¥ ¥	
1973 009C 1973 010A	COSMUS 549	6373	USSR.			
1973 0108-		6374	USSR	28 FEB	NS.	
- 1	665-80MS63	6376	USSR	1	A A A	
		6377	USSR	I MAK	18 MAR 73	
1973 0110		6385	USSR	1 MAR	12 MAR 73	
		6386	USSR USSR	XAX -	Τ-	
1973 OllF		929	2000	4		

NATIONAL	NAKO	CATALOG				
- 1	-		2007.00	LAONCA	DELAT	NUTES
1973 LAUNCHES	(CONT.)					
		6379	USSR	6 MAR	13 MAR 73	
1973 0120		1869	US5R	- 1	*	
- 1		6390	USSR	O MAR	19 MAR 73	
1973 0138		6388	S	6 HAR	Š	
		6383	SO S	9 MAR	10 MAY 73	
016 <del>*</del>	COSMOS 552	6394	NSSH	1	<b>1</b>	
1973 0166		6395	USSR	22 MAR		
017A	SALYUT 2	6398	8550	3 ADD	<b>1 3 3 3 3 3 3 3 3 3 3</b>	
0178		6399	##S58	1 A A A	20 FA 13	
1973 017C		6400	USSR	3 APR		
		6402	USSR	3 APR	9 APR 73	
1973 6175		6403	USSR	1	2	
1973 0176		6404	USSR	3 APR	APR	
		6406	USSR	3 APA	26 APR 73	
- 1		6407	USSR	1	<b>1</b> 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
1973 017M		8040	USSR	3 APR	APR	
1973 U17N		6410	USSR	3 APR	6 APR 73	_
		6412	USSR	3 APR	8 APR 73	<u>.</u>
- 1		6119	USSR	- 1	***	
1973 0171		6414	USSR	3 APR	APR	
		6416	USSR	3 APR	8 APR 73	_
1973 0174		6417	USSR		APA	
		2240	COUR	!	APR	
		6424	USSR	3 APR	10 APR 73	Tl.
- 1		6429	USSR	•	**	
1973 017AA		6430	USSR		MAY	
018A	MOLNIYA 2-5	6418	USSR	5 APR	6 JAN 79	
1973 O18C		6419	USSR	ı	\$	
- 1		6439	USSR	5 200	A DEC 30	
0190		6426	US			
1973 0208 C	comos 999	6428	USSA USSA	- 1	- 1	
¥120	COSMOS 554	555	0.00	200	2 MAX 22	
0218		6434	USSR		A PR	A V *
		6436	USSR	1	* DA	
1973 0210		6442	USSR		APR	
		6446	USSB NGCO	19 APR	24 IIII 73	
1770 C1F						

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DE SIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DĘCAY	NOTES
1973 LAUNCHES (CONT	NT.)					
1		6450	USSR	Ι.,	16 MAY 73	
1973 021J 1973 021K		6452	USSR	19 APR		
4		6453	USSR	I.		
		6454	USSR	19 APR 19 APB	27 MAY 73	
1973 021P		6456	USSR		MAY	
- 1		6457	ASSI	10 APR		
		6458	USSR	19 APK 10 ADB	9 JUN 13	
1973 6217		0949	USSR		MAY	
		6461	135R		× ×	
1973 021V		5462	USSE	19 AFK 10 APP	, X	
		6464	USSR		MAY	
626		6465	USSR		A 111N 73	
1973 0212		0400	USSE	19 APR		
1973 021AB		6468	UŠSR		<b>5</b>	
		6469	8330	90 4 01	72 111 6	
1973 021AU		0470	A221	1		
		6472	USSR	19 APR		
1973-021A6		6474	USSR	19 APR	MAY	
3		6475	USSR	1	1	
		9476	USSR	19 APR	19 MAY 73	
1973 021AM		6478	USSR		MAY	
- 1		6479	USSR		<b>X</b> ?	
1973 021AP		6480	USSR	19 APK 10 APR	15 HAY 73	
١ _		6482	USSR	19 APR		
1973 021AS		6483	USSR	19 APR	8 JUN 73	
1973 02141		6485	USSR		MAX	
		6486	USSR	19 APR	19 HAY 73	
1973 021AM		6488	USSR	1		
- 1		6489	USSR	- 1	7 S	
		6490	USSR	19 APR	14 AUG 73	
1973 02188		6492	USSR		MAY	
1973 62186 1973 02180		4649	USSR	1	١.	
- 1		6495	USSR	1	A A	
		6496	USSR	19 APK	9 JUN 13	
1973 02156		6500	USSR	_	MAY 7	

DESIGNATION	NAME	CATAL BG NUMBER	SOURCE	I AUNCH	DEC AV
1973 LAUNCHES (CONT.)					
_		6502	USSR	19 APR	2 JAN 74
1973 0218K		6504	USSR	19 APR 19 APR	18 MAY 73
1973 0218N		6505	USSR	19 APR	
1973 021BR		6508	USSR	19 APR	15 MAY 73
1		6509 6510	USSR	4	<b>∑</b> €
		6512	USSR	19 APR	
1		6514	USSR	19 APR	18 MAY 73
1973 UZ18Z		6516	USSR	- (	14 JUN 73
		6518	USSR	- 1	1
		6520	USSR	19 APR	25 MAY 73
		6522	USSR	- 1	25 MAY 73
1973 021CH		6524	USSR	. i	N
1		6526	USSR	- 1	YA
1		6528	USSR		¥.
1		6530	USSR	1	S N
1973 021CR		6532	USSR		3
1		6534	USSR	- 1	ł
1		6536	'JSSR		N P
		6538	USSR	- 1	1
		6540	USSR	1	DEC
		6542	USSR	19 APR	7 MAY 73
1973 0210C		6544 6544	USSR	19 APR	7 HAY 73
1973 0210E		6545	SSSR	- 1	*
- 1		6547	USSR	19 APR	7 MAY 73
1973 0210H		6548	USSR		
		6 N - V		7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	C.L. IMIL. I

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MATILISMA		CATALDE				
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1973 LAUNCHES (CONT	•					
١.		6552	USSR	19 APR	7 MAY 73	
1973 0210P		6554	USSR			
1973 02100		6559	USSR	19 APR	- 1	
1973 0210R		6556	USSR	19 APR	7 MAY 73	
1973 02101		6558	USSR		7 MAY 73	
1		6559	USSR			
1973 0210V		6560	USSR	19 APR	7 HAY 73	
1973 0210X		6562	USSR			
- 1		6563	USSR	19 APR	MAX	
		6564	USSR			
1		5969	333	1		
1973 021EB		0200	USSK	19 APR 10 ADP	7 MAY 72	
Į.		6568	USSR		MAY	
- 1		6959	UŞSR	- 1	¥	
_		6570	USSR	•	7 HAY 73	
1		65.7	8330	904 01	7 447	
1973 UZIEN		0212	A550 A550	- 1	7 MAY 73	
		6574	USSR		_	
1973 021EL		6575	USSR	1	¥	
		6576	USSR	19 APR	7 MAY 73	
1972 021FD		6578	USSR	7	ı	
- 1		6239	USSR	19 APR	7 MAY 73	
		6580	USSR	-	7 HAY 73	
		1869	2550	200	MAX 72	
		6582	USSK	ł		
1973 021EV		6584	USSR	_		
- 1		6869	USSR	1	XXX	
		9859	USSR	_	7 MAY 73	
- 1		7899	2550 2550	10 ADD	7 MAY 73	
		0200	A550	- 1	ı	
1973 (121FB		0659	USSR			
- 1			USSR	ı	XYX	
		6592	USSR	_		
		6593	2550	X44 67	4 444	
		6594	U55K	19 APR	X	
1973 021FH		6596	USSR		_	
- 1		6597	USSR	-1	XXX	
		6598	USSR	_	7 HAY 73	
- 1		6659	USSR	Haw 61	# # # # F	

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AAT-FORAC	CATALOG			
DESIGNATION NAME		SOURCE	LAUNCH	DECAY
1973 LAUNCHES (CONT.)				
	6602	USSR	19 APR	7 MAY 73
	660¢	USSR	19 APR	7 MAY 73
	6606	USSR	19 APR	7 HAY 73
	8066	USSR	19 APR	7 HAY 73
	6610	USSR	ŧ	7 HAY 73
	6612	USSR	19 APR	7 MAY 73
	6614	USSR	19 APR	7 MAY 73
	6616	USSR	19 APR	7 HAY 73
1973 0216F	6618	USSR	- 1	1
1973 0216H	6620	USSR		- 1
	6622	USSR	1	
1973 0216M	6624	USSR		- 1
	6626	USSR	1	- 1
	6628	USSR		1
	6669	USSR	_ 1	. ]
	6671	USSR	1. APR	A G
	6673	USSR	_ [	- 1
	6693	USSR	19 APR	24 JUN 73
	6738	USSR	19 APR	2 SEP 73 14 OCT 73
1973 021HC 1973 021HD	6740	USSR	- I	das das
022A INTERCOSMOS	6433	USSR	19 APR	15 OCT 73
	6435	USSR	0	130
l	6440	USSR		YAY
	9444 9444 9444	USSR	5	- 1
1973 025A CDSMDS 556	6446	HEEB	NAW CZ	7 MAT -23

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DESIGNATION	NAME	SOURCE	LAUNCH	DECAY	NOTES
1973 LAUNCHES (CUNT.)					
1	9630	USSR	5 MAY	-	
1973 0250 1973 025E	6631	USSR	5 HAY	17 HAY 73	
4		USSR	- 1	X¥X	
8970	6499	USSR	11 MAY	17 MAY 73	
1973 0278	6634	Sn	ł	NAL	*MY
1973 6276	6635	31	14 MAY	25 JUN 73	
	0000	ST.	- 1	9	
_	8699	SO:		_	
1973 0276	6641	SO	14 MAY	1 NDV 76	
- 1	6642		- 1		
	6643	S	14 MAY	10 FEB 75	
1973 027M	6651	Sn		12 JUN 75	
- 1	6704	<u>9ñ</u>	14 MAY	APR.	
	6705	SO	14 MAY	24 SEP 73	
1973 6270	6730	SII	14 HAY	14 SEP 73	
	6733		- 1	130	
	6735	Sn	14 MAY	20 AUG 75	
1973 027U	47.79	Sn	14 MAY	j	
	6780			12 BEG 74	
	6781	SD	14 MAY	8 NOV 74	
1973 0272	6786	Sn		1	
028A		30	15 MAY	7°	
_	8 6042	7550 11559	•		
1		USSR	18 MAY		
1973 0308 1973 030C	6649	USSR	i .	MAY 7	1
- 1	0699	USSR		3	1
		USSR	23 MAY	5 JUN 73	
1973 0316	6654	USSR			
- 1		USSR	ł	3	1
031E	4999	USSR	23 MAY	6 JUN 73	
1973 6324 SKYLAB 2	6656	US US	1	[ —	<b>.</b> 1
- 1		USSR		3	1
0336		USSR	25 MAY	2 JUN 73	ı
	6667	USSR	1	20 JUN 73	ı
1973 0350 1973 0364 COSMIS 562		USSR	4		ı
4 1 1 1 1		G5517	NI I	29 CED 73	

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DANINCHES (CONT.)   DANIES	NATIONAL NAME	CATALBG			
10   10   10   10   10   10   10   10	ES (CONT.)			->0::::	
1990   1990	0364	0777		ı	
1936    1936	1	8000	USSK	!	. 13
O. SHOS   ST2   O. SHOS   ST2   O. SHOS   O.		6703	USSR	. 1	3
1938   1938	038A COSMOS 5	6684	USSR	- 1	2 12
1000   1011	1	6685	USSR	1	‡;
1939    1939		6711	USSR		
1000   1000		6687	Sn		-4
October   Coshos 573   October   O		6690	SO	- 1	<b>2</b> \$
October   Octo	O41A COSMOS	6773 6694	855II 50	- 1	- 1
0-9-1C 6702 USSR 21 JUN 21 19-18 C05H05 575 6760 USSR 21 JUN 27 19-18 C05H05 576 6710 USSR 21 JUN 27 19-18 C05H05 576 6710 USSR 21 JUN 27 19-18 C05H05 576 6710 USSR 21 JUN 27 19-18 C05H05 576 6711 USSR 27 JUN 27 19-18 C05H05 576 6711 USSR 27 JUN 29 19-18 C05H05 576 USSR 27 JUN 29 19-18 C05H05 576 USSR 27 JUN 29 19-18 C05H05 576 USSR 21 JUN 29 19-18 C05H05 576 USSR 21 JUN 29 19-18 USSR 21 JUN 29 19-18 USSR 21 JUN 29 19-18 USSR 21 JUN 29 19-18 USSR 21 JUN 29 19-18 USSR 21 JUN 29 19-18 USSR 21 JUN 29 19-18 USSR 21 JUN 29 19-18 USSR 21 JUN 29 19-18 USSR 21 JUN 29 19-18 USSR 21 JUN 29 19-18 USSR 25 JUN 29 19-18 USSR	0418	6695	USSA	1	<b>T</b> :
0438 6776 6771 USSR 27 JUN 27 10448 6776 6771 USSR 27 JUN 27 10448 6776 6771 USSR 27 JUN 27 10448 6776 6771 USSR 27 JUN 30 10448 6776 6771 USSR 27 JUN 30 10448 6771 USSR 27 JUN 30 10448 6771 USSR 27 JUN 30 10448 6771 USSR 27 JUN 14 10448 6771 USSR 27 JUN 14 10448 6771 USSR 27 JUN 14 10448 6771 USSR 27 JUN 14 10448 6772 USSR 27 JUN 14 10448 6771 USSR 27 JUN 14 10448 6771 USSR 27 JUN 14 17 10448 6771 USSR 27 JUN 14 17 17 17 17 17 17 17 17 17 17 17 17 17	0410	6702	USSR		21
CATTO   CONT	0438	6710	USSR	1	
0440 0441 0441 0441 0441 0444 0444 0444	0448	6714	UŠSR	1	- 4
Color   Colo		6716	NSSR		
044F   6719   USSR   27 JUN   11     044H   6721   USSR   27 JUN   11     044H   6721   USSR   27 JUN   11     045D   6721   USSR   11 JUL   29     045D   6721   USSR   11 JUL   29     045D   6721   USSR   11 JUL   29     046D   6727   USSR   11 JUL   29     047D   6727   USSR   21 JUL   29     047D   6727   USSR   25 JUL   27     048D   6727   USSR   25 JUL   27     048D   6727   USSR   25 JUL   27     048D   6727   USSR   25 JUL   27     048D   6727   USSR   25 JUL   27     048D   6727   USSR   25 JUL   27     048D   6727   USSR   25 JUL   27     048D   6728   USSR   25 JUL   27     048D   6729   USSR   25 JUL   27     048D   6729   USSR   25 JUL   27     048D   6729   USSR   25 JUL   27     048D   6729   USSR   25 JUL   27     048D   6729   USSR   1 JUL   28     051D   COSMOS 578   6761   USSR   1 JUG   28     051D   USSR   1 JUG   2		6717	0558 0558	•	ł
044H 0457 0458 0457 0458 0457 0458 0457 0458 0458 0458 0470 0470 0470 0470 0470 0470 0470 047	1	6719	USSR		
O456   O4577   O4576   O4577	044H	6721	USSR	- 1	1
OFFICE   O	0458	6723	USSR	•	1
0468     6728     US     13 JUL     12 JUL     12 JUL     15 JUL     12 JUL     15 JUL     12 JUL     15 JUL     15 JUL     15 JUL     15 JUL     15 JUL     12 JUL     26 JUL     21 JUL     26 JUL     26 JUL     27 JUL     26 JUL     27 JUL     26 JUL     27 JUL     26 JUL     27 JUL     28 JUL     28 JUL     28 JUL     28 JUL     28 JUL     28 JUL     28 JUL     28 JUL     28 JUL     28 JUL     28 JUL     28 JUL     28 JUL     28 JUL     28 JUL     28 JUL     28 JUL     <		6741	USSR	1	
047C 605M03 577 6744 USSR 21 JUL 23 0488 C05M03 577 6745 USSR 25 JUL 27 0488 C05M03 577 6753 USSR 25 JUL 17 0486 C05M03 577 USSR 25 JUL 17 0486 C05M03 577 USSR 25 JUL 17 0486 C05M03 578 6755 USSR 25 JUL 27 0498 USSR 25 JUL 27 0498 USSR 25 JUL 27 0498 USSR 25 JUL 27 0498 USSR 25 JUL 27 0498 USSR 25 JUL 27 0500 SKYLA8 3 6757 USSR 25 JUL 27 0500 USSR 26 JUL 27 0500 USSR 1 AUG 28 0510 USSR 1 AUG 28 0510 USSR 1 AUG 2 0510 USSR		6728	SO		•
0488         COSMOS 577         6745         USSR         25 JUL         1           048B         6753         USSR         25 JUL         1           048B         6770         USSR         25 JUL         1           048B         6772         USSR         25 JUL         1           049B         6755         USSR         25 JUL         27           049B         6757         USSR         25 JUL         27           049B         5756         USSR         25 JUL         27           049B         6757         USSR         25 JUL         27           050A         5KYLAB         3         6757         USSR         28 JUL         27           051A         COSMOS         578         6761         USSR         1 AUG         29           051C         6761         USSR         1 AUG         3           051E         6762         USSR         1 AUG         2           051E         6763         USSR         1 AUG         2           051E         6763         USSR         1 AUG         2           051E         6763         USSR         1 AUG         2		6744	USSR	. 1	- 1
0.480     0.750     0.753     0.758     25 JUL     1       0.480     6.772     0.858     25 JUL     1       0.498     6.775     0.558     25 JUL     27       0.498     6.755     0.558     25 JUL     27       0.498     6.756     0.558     25 JUL     27       0.500     3KYLAB     3     6.757     0.58     25 JUL     27       0.500     3KYLAB     3     6.759     0.58     28 JUL     28       0.510     0.510     0.510     0.588     1 AUG     1       0.510     0.510     0.510     0.588     1 AUG     3       0.511     0.512     0.763     0.588     1 AUG     2       0.520     0.520     0.528     1 AUG     2       0.520     0.520     0.528     1 AUG     2       0.520     0.520     0.528     1 AUG     2       0.520     0.520     0.520     0.520     0.520     0.520	0484	6745	USSR		- 1
048D     6772     USSR     25 JUL     12       048E     6785     USSR     25 JUL     27       049B     6785     USSR     25 JUL     27       049B     05SR     25 JUL     27       049B     USSR     25 JUL     27       059C     USSR     28 JUL     28       050B     USSR     1 AUG     13       051B     6769     USSR     1 AUG     1       051C     6761     USSR     1 AUG     3       051B     6763     USSR     1 AUG     2       051C     6763     USSR     1 AUG     2       052B     6763     USSR     1 AUG     2       052B     6763     USSR     1 AUG     2       052B     6763     USSR     1 AUG     2       052B     6763     USSR     1 AUG     2       052B     6763     USSR     1 AUG     2       052B     6763     USSR     1 AUG     2       052B     6763     USSR     1 AUG     2       052B     6763     USSR     1 AUG     2       052B     6763     USSR     1 AUG     2       052B     6764	- 1	6778	USSR	1	-
0498 6755 USSR 25 JUL 27 049C 6756 USSR 25 JUL 27 050A SKYLAB 3 6757 US 28 JUL 25 050B COSMOS 578 6759 USSR 1 AUG 29 051C USSR 1 AUG 29 051E USSR 1 AUG 2 051E USSR 1 AUG 2 051E USSR 1 AUG 2 051E USSR 1 AUG 2 051E USSR 1 AUG 2 051E USSR 1 AUG 2 051E USSR 1 AUG 2 051E USSR 1 AUG 2 051E USSR 1 AUG 2 051E USSR 1 AUG 2	Ι.	6772	USSR		N -
050A SKYLAB 3 6757 US 28 JUL 25 050B SKYLAB 3 6757 US 28 JUL 26 051B COSMOS 578 6759 USSR 1 AUG 13 051C 6762 USSR 1 AUG 5 051C 051C 6763 USSR 1 AUG 5 051E 052C 6763 USSR 1 AUG 2 052C 5757 USSR 1 AUG 2 052C 5757 USSR 1 AUG 2	ŀ	6755	USSR	- 1	
0500     0500     0500     0500     0500     0500     0510	050A SKYLAB	6757	US NGCO	- 1	- 1
0518 0760 0760 0518 1 AUG 9 0510 0761 USSR 1 AUG 9 0510 0762 USSR 1 AUG 2 0518 0763 USSR 1 AUG 2 0528 0769 USSR 1 AUG 2 0528 0769 USSR 1 AUG 2	0508 CDSMDS	6758	SA	- 1	ı
051C 6761 USSR 1 AUG 5  0510 6762 USSR 1 AUG 2  0518 0526 6763 USSR 1 AUG 2  0520 6763 USSR 5 AUG 2	0510	6760	USAR VSAR	1 406	•
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		6767	055X	- 1	2 AUG

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S			SOURCE
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DE SIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1973 LAUNCHES	ES (CONT.)					
1973 0538		1119	USSR	9 AUG		
1973 0536	625 SUNSUJ	6778	USSR	21 AUG	3 SEP 73	
		9629	USSR	Г	9A	
		6795	USSR	21 AUG	25 AUG 73	
1		6814	USSR	Ι	1	
	COSMOS 580	2023	8550	22 AUG	47 VON 05	
1973 0578	189 308300	6794	USSR	· [	- 1	
1973 0598	Too coucha	6679	USSR	_		
- 1		6801	HSSH	24 AUG	S SFP 73	
1973 0590		0100	A550 833U	1	, d	
1	CDSMOS 582	6802	USSR	_	5 SEP 80	
1973 0608		6803	assii	28 AUG	20 JUN 82	
- 1		+000 +000	USSR	ł	A A	
		6669	USSR	_	7 NOV 74	
1973 0614		6806	USSR	30 AUG	1 OCT 73	
		6807	USSR	30 AUG	6 001 23	
		6808	USSR	30 AUG	6 SEP 73	
1973 661E		6815	USSR	Γ.	5 DEC 79	
	C85 SBMS 283	6089	USSR	ŧ	ı	
_		6810	USSK USSB	30 AUG	3 SEP 73	
1973 063A	COSMOS 584	6818	USSR	6 SEP	20 SEP 73	
1973 0638		6820	USSR	6 SEP		
		6821	USSR	933	1	
		6830	USSR	0 SEP 4 SEP	26 SEP 73	
1973 0636		6835	USSR	6 SEP		
	FOR SOLD	6827	USSR	21 SEP	4 001 73	
1973 C660	ı	6833	USER	- 1	4	
		6834	USSR	21 SEP	23 SEP 73	
1973 0660 1973 066E		6855	USSR	ł	4 OCT 73	
- 1	SOXUZ 13	6836	USSR	- 1	1	*
		6838	USSR	27 SEP	29 SEP 73	
1973 0670 1973 0670		6840	USSR		3 NOV 73	
- 1	ŀ	6837	\$0	1	0 007 73	
	COSMUS 596	6856	USSK USSB	3 001	9 001 73	
1973 070C		6861	USSR	3 OCT	17 OCT 73	
		0307	05511	100 9	12 DCT 73_	

DESIGNATION	NAME	NIMBER	SOUBCE			
1973 LAUNCHES	IES (CONT.)				5402	MOTES
		6859	USSR	6 OCT	14 OCT 73	
1973 0710		6865	USSR	- 1		
	COSMUS 598	6862	USSR	10 007		
		6864	USSR	10 007	21 OCT 73	
1973 072E	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	6872	USSR	10 007	2	
	COSHOS 277	6868	USSR	15 OCT	20 OCT 73	
		6870	USSR	u jh		
1973 074B	CONCO CONCO	6874	USSR	16 OCT	캶	
l		6888	USSR	16 OCT	24 OCT 73 28 OCT 73	
1973 075A	COSMOS 601	6875	UŠSR	16 007	29 OCT 73	
1		6880	USSR	٠ ٦		*
		6882	USSR	- 1	7 FEB 74	
		6884	USSR	- 1	- 1	
1 -		6890	USSR	ı	1	
ŀ		6892	USSR	16 OCT	• DEC 73	
1973 075N		6922	USSR	16 OCT	19 NOV 73	
1	MOLNIYA 2-7	6877	USSR	- 1	200	
ı		6879	USSR	19 OCT	18 DEC 73	
1973 077A	COSMUS 602	6885	USSR	3	C 4	
		6905	USSR	20 OCT	31 007 73	
-		6894	US	20 OCT 26 OCT		
1973 0794	COSMUS 603	6900	USSR	26 BCT	₹ †	
1973 079C		6903	USSR NSSR			
1973 0796 1973 079E		6904	USSR	27 001	29 OCT 73	
1973 082A	INTERCOSMOS 10	6925	USSR		\$	

MATIONAL						
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1973 LAUNCHES (CDI	(CONT.)					
1973 082C		6915	USSR	30 OCT		
4690	COSMOS 605	6469	USSR		ł	
_		6914	USSR	31 OCT	28 NOV 73	
1973 0830		6948	USSR			
- 1		6949	USSR	31 001	NAN	
_		9569	USSR		30 DEC 73	
1973 0848		4918	USSR	2 NOV	29 JAN 74	
1913 USTC		7070		- 1	- 1	
		2090	Sn	ADN 9		
1973 0860X		7159	377	*0* •		
_		7197	20.5	ADN 9	9 JUN 80	
1973 086FH		7201	Sn	ADN 9	17 NOV 79	
		7204	30	- 1	13 056 77	
		7205	S	AON 9	14 DEC 76	
1973 086FQ		7206	90		1	
_		7207	S	9 V	33 NEC 78	
		0.700	SI1	AUN 9	_	
1973 085FT COSM		4026	8550		7	
0878		6927	USSR			
1973 0876		6930		ł	ı	
		6945	USSK	ADM OT	25 NON 23	
1973 OB A		6928	SO		_	
- 1		6929	ns	10 NBK	13 ABY 73	
0880	!	6931	Sn	10 NDV	26 DEC 78	
₩680	MOLNI VA 1-25	6933	IISSR	1	2 JAN 74	
1973 0896		6924	USSR	- 1	26 NOV 73	
L _		6935	USSR	14 NOV	26 JAN 74	
1973 089E	7 8 4	6936	US	16 NOV	r –	ŭ.
8060	- 1	6937				
	0S 608	6941	USSR	20 NDV	10 JUL 74	
1973 0918 COSMUS	609 50	6943	USSR		)	
0028	- 1	6944	USSR	- 1	7	
		6963	USSR	21 NOV	6 DEC 73	
0360	t	4060	APPEN APPEN		15 SEP 80	
_	019 610	695U 4061	A550	- 1		
1973 0930		6962	USSR		29 JUN 75	
094A	COSMOS 611	6952	#\$\$0	1	24 WAD 74	
6948	1	6955	USSK	28 NOV	- 1	
1973 695A CUSH	CUSHUS 612	4954	USSR			

NAT TONAC		CATAL 06				
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1973 LAUNCHES (CO	(CONT.)			***************************************		
		6969	USSR	28 NOV	12 DEC 73	
i	US 613	6957	USSR	ADN OE	29 JAN 74	
1973 096C		7103	USSR	AUN UE	9 MAD 74	
4460	MOLNIYA 1-26	6950	USSR			
		6959	USSR			
	QS 615	6971	USSR	- 1	200	
1973 100C		6975	US	13 DEC	17 DEC 73	
1017	EXPLORER 51	6977	SA	- 1	960	
1973 1018	coempe (1)	6978	S	16 DEC	<b>2</b> €	
1028		6980	USSR	17 DEC		
		6994	USSR	17 DEC		
102F		7007	UŠSR	17 DEC	2 JAN 74	
1038	30102 13	6983	USSR	18 DEC	26 0EG 73 22 DEC 73	<b>‡</b>
1973 103C COSMOS	OS 625	6984 5995	USSR USSR	18 DEC	3 JAN 74	
		6996	USSR	日中		
105E		7011	USSR	21 DEC		
1008	HOLINIA V-O	7001	USSR	5	24 JAN 74	
		7372	USSR	U Y	24 MAY 85	d :
		7114	USSR	~ †	23 FEB 74	100
1973 108E		7116	USSR	27 DEC	16 FEB 74	ስ v
1974 LAUNCHES						IAU
	ET 2A	7096	Ç		LAN	(TI)
		7098	S. C.	· I	- 1	נ
1974 003A COSMOS	OS 629	7100	USSR	24 JAN	5 FEB 74	
8698	- 1	7101	USSR		4	
1974 0030		7108	USSR	CA JAN	20 JAN /4	
1974 004A COSMOS	OS 630	7104	USSR	NAF OE		
		7106	CSSR	NAT OF	6 FER 74	

INIEK- MATTONAL		CATAL 06				
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1974 LAUNCHES	(cont.)					
1		9117	USSR	30 JAN	14 FEB 74	
1974 004F	COSMUS 631	7109	USSR	•		
		7110	USSR	1	1	
		7111	USSK	0 reb	11 061 75	
1974 005E		7257	USSR		_	
	COSMOS 632	7110	9301	12 EFR	17 FFR 74	
		7121	USSB USSB		ᆎ	
1974 0060		7172	USSR			
- 1		7189	7330 311	13 FFB	17 MAR 74	
	TANCELS	7122	REGET		1	
1974 008B	3.136164	7123	NAPAN		21 JAN 83	
- 1	SAN MARCO 4	7154	344	10 550	0 HIN 74	
	00000	7157	9300	10 FEB	ı	
1974 6108	CCO chucho	7188	USSR			
	CDSNOS 634	7211	155R	NAM C	72 711	
		7212	USSK	5 MAR	- 1	
1974 013C		7215	ň	9 MAR		
- 1		72214	AN III	14 MAR	26 MAR 74	
1974 OL4A	CUSMUS 633	7217	W330	٠.		
١.		7220	USSR	14 MAR	23 MAR 74	
		7221	ASSII	14 MAR	7 APR 74	
1974 014E	COCHOC 434	7235	assn .	- 1	- 1	
1974 0168		7226	USSR		24 MAR 74	
- 1		7227	8330	20 MAR	A A PR 74	
		7223	A550	- 1	- 1	
1974 016F		7239	USSR			
- 1		7230	HSSN.	26 MAK	20 20 20	
		7231	USSR	26 HAR 26 MAD		
		7249	USSR		16 NOV 76	
1974 CITE	CDEMOE 638	7234	USSR		-	
Ι.	oro course	7235	USSR	3 APR	9 APR 74	
- 1		7236	SSR	2 400	5 APR 74	
		7239	USSE	- 1	- 1	
1974 018E	COSMOS 639	7240	USSR	4 APR	15 APR 74	
- 1		7241	USSR	APR		
		7253	USSR	4 APK	10 APK (4	
1974 6190		1255	USSR	4 APR	_	
		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				

17 - 10125	CATALOD			
CHOTCANTION	NAME	SOURCE	LAUNCH	DECAY
1974 LAUNCHES (CONT.)				
ł	7242	Sn	10 APR	28 JUL 74
1974 0200	7247 7243	Sn	10 APR	12 APR 74
1374 021A CUSMUS 640	7245	USSR	11 APR	\$
1	7251	15 COUR	LI ATK	15 ATX 15
0220	7252	SS		VON
1974 0238	7261	USSR	20 APR	4.2 NON 21
i	7262	USSR	- 1	=
1974 0236	7263	USSR	20 APR	4 MAY 74
	7277	USSR		-
0260	7279	USSR	26 APR	28 APR 74
1974 0278 COSMOS 647	7288 7282	USSR	29 APR	3 MAY 74
1974 0270	7286	USSR	29 APR	16 MAY 74
1974 027E	7207	#55R	- 1	t
1	7289	0358	29 498	13 444 74
	7387	USSR	L	
l l	7292	USSR	15 MAY	
	7308	USSR	15 HAY	27 HAY 74
1974 030E	7311	USSR	15 MAY	
1974 0306	7312	USSR	15 MAY	25 MAY 74
- 1	7293	855B	- 1	ŧ
1974 0316	7295	USSR	15 HAY	20 MAY 74
1	7395	USSR	17 HAY	<b>∆</b>
	7397	USSR	TA HAY	SEP
1974 0338	7300	SO	17 HAY	20 MAY 74
- 1	7301	<del>8</del>	17 MAY	***
1974 0330	7303	US.	17 MAY	VOV
	11 7299	USSR	17 MAY	6 SEP 79
1974 034C	7305	USSR	17 MAY	29 DEC 74
<del>1974 035A - CDSMOS 655</del> 1974 635B	7300	USSR	- XX #XX	3
- 1	7515	USSR		10 JUL 01
1974 0350	7516	USSR		

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Fig.   Marke   Murrier   Source   Lanich   Decay	MATIONAL		CATALOS				
CLAUNCHES (CONT.)   7518   USSR   21 MAY   21 OCT 79	ESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOIES
CUSSE         TISSE         USSR         21 MAY	974 LAUNCHES						
1971   1978   21 mt   11 mt   12 mt	974 C		7518	USSR		000	
COSMOS 654   7314   USSR   27 MAY   2 MAY	1		7519 8778	USSR	I	NAU	
1314   1055R   27 MAY   2 JUN   14     1322   1055R   27 MAY   2 JUN   14     1324   1055R   29 MAY   2 JUN   14     1325   1055R   29 MAY   2 JUN   14     1326   1055R   29 MAY   2 JUN   14     1327   1055R   29 MAY   2 JUN   14     1328   1055R   29 MAY   2 JUN   14     1329   1055R   29 MAY   2 JUN   14     1320   1055R   29 MAY   2 JUN   14     1320   1055R   29 MAY   2 JUN   14     1321   1055R   29 MAY   2 JUN   14     1322   1055R   29 MAY   2 JUN   14     1323   1055R   29 JUN   29 JUN   14     1324   1055R   29 JUN	1050 1050		7313	USSR	- 1	J	
1972   1972   1975	036B		7314	USSR	- 1	- 1	
Colored Colo	1		7322	USSR			
1936   1938   1944	0370	6.4	7323	USSR	i i	3 JUN	
USSR   SOLATOR   COSMOS 664	0.5 0.A 0.3 0.B	5	7320	WS\$R			
0.4580         7.335         U.SSR         30 HAY         11 JUN 7.4           0.4500         COSHUGER 52         7.325         U.SSR         3 JUN 7.4         14 JUN 7.4           0.4500         COSHUG 658         7.327         U.SS         3 JUN 7.4         10 NUV 7.4           0.4500         7.327         U.SSR         5 JUN 7.4         10 NUV 7.4         10 NUV 7.4           0.4500         7.327         U.SSR         6 JUN 7.4         10 NUV 7.4         10 NUV 7.4           0.4500         7.328         U.SSR         6 JUN 7.4         10 NUV 7.4         10 NUV 7.4           0.4500         7.328         U.SSR         6 JUN 7.4         10 NUV 7.4         10 NUV 7.4           0.4500         7.330         U.SSR         6 JUN 7.4         10 NUV 7.4         10 NUV 7.4           0.4500         7.330         U.SSR         13 JUN 7.4         10 NUV 7.4         10 NUV 7.4           0.4500         7.330         U.SSR         13 JUN 7.4         10 NUV 7.4         10 NUV 7.4           0.4500         7.340         U.SSR         2.3 JUN 7.4         10 NUV 7.4         10 NUV 7.4           0.4500         7.340         U.SSR         2.3 JUN 7.4         10 NUV 7.4         10 NUV 7.4      <			7321	USSR	1	1	
04349         CKPLURER 52         73245         US         3 JUN         28 APR 78           0404         0404         1324         US         3 JUN         11 BCT 71           0406         0406         1324         US         3 JUN         11 BCT 71           0406         0406         1324         US         3 JUN         12 MW 71           0410         0410         1324         USSR         6 JUN         13 JUN 71           0411         0412         0428         6 JUN         13 JUN 71           0424         0450         0458         13 JUN 71         13 JUN 71           0434         0450         058         13 JUN 71         13 JUN 71           0435         0450         058         13 JUN 71         14 JUN 71           0436         0450         058         13 JUN 71         14 JUN 71           0436         0450         058         13 JUN 71         14 JUN 71           0436         0450         058         13 JUN 71         14 JUN 71           0436         0460         058         068         069         160           0440         0460         068         068         069         160 <td< td=""><td>ı</td><td></td><td>7333</td><td>USSR</td><td></td><td>3</td><td></td></td<>	ı		7333	USSR		3	
0490         COSMOS 658         1327         US         3 UM         10 MOY 74           0400         1327         US         3 UM         10 MOY 74           0400         1327         US         3 UM         11 MOY 74           0400         1327         US         5 UM         12 UM         74           0410         1328         US         6 UM         18 UM         74           0410         1328         US         6 UM         18 UM         74           0430         1330         US         13 UM         74         14	8660	1	7319	SN	I	APR	
1927   1928	4040 4040		7326	30	[	3	
0418         CUSKIDS 658         7328         USSR         6 JUN 12 JUN 14           0418         CUSKIDS 658         7329         USSR         6 JUN 23 JUL 14           0418         CUSKIDS 659         7330         USSR         13 JUN 14           0438         CUSKIDS 659         7335         USSR         13 JUN 14           0438         CUSKIDS 661         7340         USSR         13 JUN 14           0438         CUSKIDS 661         7340         USSR         21 JUN 14           0458         SALYUT 3         7342         USSR         21 JUN 14           0450         CUSKIDS 661         7342         USSR         21 JUN 14           0450         CUSKIDS 662         7347         USSR         24 JUN 14           0450         CUSKIDS 662         7347         USSR         24 JUN 14           0440         CUSKIDS 662         7347         USSR         24 JUN 14           0440         CUSKIDS 664         7347         USSR         29 JUN 14           0440         CUSKIDS 664         7348         USSR         29 JUN 14           0440         CUSKIDS 664         7349         USSR         29 JUN 14           0448         CUSKIDS 664	1		7327	Sn			
0428         6 JUN 23 JUL 74           0424         C05MB5 659         7335         USSR         13 JUN 23 JUL 74           0438         1339         USSR         13 JUN 22 JUL 74           0436         0436         13 JUN 22 JUN 74           0436         0436         13 JUN 22 JUN 74           0436         0436         13 JUN 27 JUN 74           0436         13 JUN 27 JUN 74         14 JUN 27 JUN 74           0456         13 JUN 27 JUN 74         14 JUN 27 JUN 74           0456         13 JUN 27 JUN 74         14 JUN 27 JUN 74           0456         13 JUN 27 JUN 74         14 JUN 27 JUN 74           0456         13 JUN 27 JUN 74         14 JUN 74           0456         13 JUN 27 JUN 74         14 JUN 74           0456         13 JUN 27 JUN 74         14 JUN 74           0456         13 JUN 17         14 JUN 17           0456         13 JUN 17         14 JUN 17           0456         13 JUN 17         14 JUN 17           0457         13 JUN 17         14 JUN 17           0458         13 JUN 17         14 JUN 17           0459         13 JUN 17         14 JUN 17           0450         13 JUN 17         14 JUN 17 <t< td=""><td>0400</td><td></td><td>7328</td><td>UŠSR</td><td></td><td></td><td></td></t<>	0400		7328	UŠSR			
042A         C05MD5         659         7335         UUSSR         13 JUN         74           043B         043B         1335         UUSSR         13 JUN         74           043B         043B         1335         UUSSR         13 JUN         73           043B         043B         1335         UUSSR         21 JUN         73 JUN         73           045B         045B         1344         USSR         21 JUN         27 JUN         73 JUN         73 JUN         73 JUN         73 JUN         74           046B         SALYUT         1344         USSR         24 JUN         27 JUN         73 JUN         74           046B         SALYUT         1344         USSR         24 JUN         27 JUN         74           046B         SALYUT         1344         USSR         24 JUN         74 JUN         74           046B         SALYUT         1344         USSR         24 JUN         74 JUN         74           046C         SALYUT         1344         USSR         24 JUN         24 JUN         74 JUN         74 JUN         74 JUN         74 JUN         74 JUN         74 JUN         74 JUN         74 JUN         74 JUN         74 JUN	4 4	- 1	7329	8330		Γ.	
0436         USSR         13 JUN 14           0436         USSR         13 JUN 14           0436         USSR         13 JUN 27           0436         USSR         21 JUN 27           0456         SALYUT 3         7342         USSR         24 JUN 27           0456         SALYUT 3         7342         USSR         24 JUN 27         10 TN 7           0456         SALYUT 3         7342         USSR         24 JUN 27         10 TN 7           0456         SALYUT 3         7342         USSR         24 JUN 27         10 TN 7           0456         SALYUT 3         7344         USSR         24 JUN 27         10 TN 7           0456         SALYUT 3         7344         USSR         26 JUN 27         24 JUN 27           0456         SALYUT 3         7344         USSR         26 JUN 27         24 JUN 27           0456         CASMOS 662         7347         USSR         29 JUN 11 JUL 74           0457         CASMOS 664         7355         USSR         29 JUN 11 JUL 74           0458         CASMOS 664         7355         USSR         29 JUN 12 JUL 74           0458         CASMOS 664         7356         USSR         29 JUN 1	042A		7336	035U	. 1		
0436         USSR         13 JUN         27 JUN         14 JUN         27 JUN         14 JUN         27 JUN         14 JUN         27 JUN         14 JUN         27 JUN         14 JUN         27 JUN         14 JUN         27 JUN         15 JUN         15 JUN         15 JUN         16 GCT         80           0456         SALYUT         7344         USSR         24 JUN         27 JUN         14 JUN         27	0438		7335	USSR		- 1	
045B         COSMUS COL         1339         USSR         21 JUN         16 DCT         80           045B         045B         7340         USSR         24 JUN         24 JUN         27	- 1		7346	USSR	7		
045B         7340         USSR         21 JUN         10 Uc 18 Uc 18 Uc 14 Uc 14 Uc 15 Uc 18 Uc 14 Uc 14 Uc 15 Uc 18 Uc 14 Uc 14 Uc 15 Uc 18 Uc 14 Uc 1	2540	199 50N3U	7339	USSR		<b>∮</b> ;	
046A         SALYUT         3         7342         USSR         24 JUN         24 JUN         74 JUL	0458		7340	USSR USSB	- 1	34	
046B         046B         1344         USSR         24 JUN         27 JUN         74 JUN         27 JUN         74 JUN         27 JUN         74 JUN         27 JUN         74 JUN         27 JUN         74 JUN         27 JUN         28 JUN         74 JUN	046A	1	7342	USSR			
Q470         COSMOS 662         7347         USSR         24 JUN         28 AUG 76           C47A         COSMOS 662         7347         USSR         26 JUN         26 AUG 76           C47B         COSMOS 664         7351         USSR         29 JUN         11 JUL 74           C47B         COSMOS 664         7355         USSR         29 JUN         9 JUL 74           C49C         7356         USSR         29 JUN         8 JUL 74           C49C         7356         USSR         29 JUN         8 JUL 74           C49C         7356         USSR         29 JUN         8 JUL 74           C49C         7356         USSR         29 JUN         8 JUL 74           C49C         7356         USSR         29 JUN         8 JUL 74           C49C         7356         USSR         29 JUN         13 JUL 74           C49C         736F         USSR         29 JUN         13 JUL 74           C51A         SDYUZ 14         7369         USSR         29 JUN         13 JUL 74           C51A         SDYUZ 14         7361         USSR         29 JUN         17 JUL 74           C51A         SDYUZ 14         7361         USSR         3 JUL	- 1		7344	USSR	l l		
047A         COSMOS 662         7347         USSR         26 JUN         27 JUN         26 JUN         26 JUN         26 JUN         27 JUN         26 JUN         27 JUN <td>0460</td> <td></td> <td>7345</td> <td>1558</td> <td>ł</td> <td></td> <td></td>	0460		7345	1558	ł		
0494         COSMOS 664         7351         USSR         29 JUN         11 JUL 74           0496         USSR         29 JUN         8 JUL 74           0490         USSR         29 JUN         8 JUL 74           0490         USSR         29 JUN         8 JUL 74           0490         USSR         29 JUN         1 JUL 74           0496         USSR         29 JUN         13 JUL 74           0496         USSR         29 JUN         13 JUL 74           0496         USSR         29 JUN         13 JUL 74           0496         USSR         29 JUN         13 JUL 74           0496         USSR         29 JUN         13 JUL 74           0496         USSR         29 JUN         13 JUL 74           0496         USSR         29 JUN         13 JUL 74           0496         USSR         29 JUN         13 JUL 74           050         USSR         29 JUN         17 JUL 74           050         USSR         3 JUL 74         17 JUL 74           051         USSR         3 JUL 74         17 JUL 74           053         USSR         12 JUL 74         11 JUL 74           053         USSR	047A		7347	USSB	ŧ	ŀ	
0498         0458         29 JUN         8 JUL 74           0490         1356         USSR         29 JUN         1 JUL 74           0490         1356         USSR         29 JUN         13 JUL 74           0496         1358         USSR         29 JUN         13 JUL 74           0496         1355         USSR         29 JUN         13 JUL 74           0496         1355         USSR         29 JUN         13 JUL 74           0508         USSR         29 JUN         13 JUL 74           0508         USSR         29 JUN         13 JUL 74           0510         USSR         3 JUL 74         74           0510         USSR         3 JUL 74         74           0510         USSR         3 JUL 74         74           0510         USSR         3 JUL 74         74           0510         USSR         3 JUL 74         74           0510         USSR         3 JUL 74         74           0510         USSR         12 JUL 74         74           0510         USSR         12 JUL 74         74           0510         USSR         12 JUL 74         74           0510         <	4640 0494	\$ 66	7351	USSR			
0490         100			7356	USSR			
049E         1358         USSR         29 JUN         8 JUL 74           049E         1359         USSR         29 JUN         13 JUL 74           049G         1359         USSR         29 JUN         13 JUL 74           049G         USSR         29 JUN         13 JUL 74           050B         USSR         29 JUN         13 JUL 74           050B         USSR         29 JUN         13 JUL 74           050B         USSR         3 JUL 14         74           051C         USSR         3 JUL 17         10 JUL 74           051C         USSR         3 JUL 17         10 JUL 74           051C         USSR         3 JUL 17         10 JUL 74           051C         USSR         12 JUL 74         14 JUL 74           051C         USSR         12 JUL 74         13 JUL 74           053R         USSR         12 JUL 74         14 JUL 74           053R         USSR         12 JUL 74         14 JUL 74           053R         USSR         12 JUL 74         14 JUL 74			7357	8330	1	1	
049F         1489         1489         1488         29 JUN         13 JUL 74           0496         1365         USSR         29 JUN         13 JUL 74           0496         USSR         29 JUN         13 JUL 74           050B         USSR         29 JUN         13 JUL 74           050B         USSR         3 JUL 14         74           051C         USSR         3 JUL 14         74           051C         USSR         3 JUL 17         17 JUL 14           7374         USSR         3 JUL 17         10 JUL 14           74         USSR         12 JUL 14         25 JUL 14           74         USSR         12 JUL 14         14 JUL 14           7374         USSR         12 JUL 14         14 JUL 14           736         USSR         12 JUL 14         14 JUL 14           736         USSR         12 JUL 14         14 JUL 14			7358	USSR		ŧ	
0490 0490 0490 0490 0490 0490 0490 050B 050B 050B 050B 050B 050B 050B 05			7365	USSR			
0508 0508 0508 0508 0508 0508 0508 0508			7366	USSR	ĺ		
0500     0500       051A     SQYUZ 14       7361     USSR       051B     14 17 JUL 74       051C     1374       055C     12 JUL 25       053R     12 JUL 18 JUL 74			7353	USSR	۵ م	1 SEP 74	
0510 0510 1374 0558 3 JUL 17 7374 0558 3 JUL 17 7369 0538 12 JUL 25 18 7368 12 JUL 18 18 7368 12 JUL 18 7368 12 JUL 18		-	7361	USSR	Ī		₩
051C 0534 C05MUS 666 7369 USSR 12 JUL 18 0538 0538	- 1		1362	USSR			
0538 USSR 12 JUL 18	0510		1367	USSR	- 1		
	053B	200-5946	7368	USSR			

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	J	φ	055R	7440	USMUS 686	4 074A
	SEP	20 SEP	USSR	7444		1974 0738
	1	1	U55R	7445	COSMUS 665	6734
	10 APR 75	30 AUG	HIBN	7694		-
			NETH	7429		1974 0700
	¥0¥	- 1	SA	7428		- 1
	14 JUN 77		NETH	7427	ANS	070A
	SEP	29 AUG	COUR	7432		1
	557		055R	7621		1974 0686
	SEP		USSR	7423	COSMOS 674	0684
7	20 AUG 74	26 AUG	U\$\$8	7422		0678
7	4	26 AHG	USSR CO	7421	S0YUZ 15	067A
	AUG G		USSR	7415		1974 0640
	10 AUG 74	908 21	055A	7414	- 1	840
	1	•	855II	7413	COSMOS 672	064A
	SEP	7 AUG	USSR	7419		1974 062C
	20 AUG 74	7 406	955B	7410	- 1	0628
	ŧ		0338	7408	COSMOS 671	062A
	9 AUG 74		USSR	7405	COSMOS 670	
	JAN	ł	USSR	7400		1974 060E
	4		WSSR	7394		- 1
	1 AUG 74	29 JUL	USSR	7393		_
	AUG C		USSR	7403		1974 059F
	8 AUG 74	20 305	9358 9358	7402		
	=	- 1	1888 8888	7401		
	30 JUL 74		USSR	7390		1974 0598
	VOV	25 JUL	COOK	7309	CBSM05 669	4650
	100	- 1	USSR	7386	CD3HD3 000	0588
	18 AUG 74	25 JUL 52	USSR	7408	Bewor (10	
	5		USSR	7384		1974 0576
	20 AUG 74	25 300	035R	£967	COSMOS 667	0574
	*	- 1	1358 1358	7378		
	OCT		FRG	7380		1974 055C
	SEP	1	FRG	7371	KEKUS Z	0558
	*	t	5n	7376	2000	
	30 JUL 74	12 שער	USSR	7381		1974 0530
					(CONT.)	1974 LAUNCHES
NOTES	DECAY	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION
						THE PERSON NAMED

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DESIGNATION NAME  1974 LAUNCHES (CUNT.)  1974 0746  1974 0746  1974 0746  1974 0746  1974 0744  1974 0744  1974 0744  1974 0748  1974 0748  1974 0748  1974 0748  1974 0748  1974 0748  1974 0748  1974 0748  1974 078  1974 078  1974 078  1974 078  1974 078  1974 078  1974 078  1974 078  1974 078  1974 078  1974 078  1974 078  1974 078  1974 078  1974 078  1974 078  1974 078  1974 0808  1974 0808  1974 0808  1974 0808  1974 0808	7449 7449 7450 7451 7453 7455 7455 7456 7450 7461 7461 7463 7463 7463 7463 7463 7463 7463	USSR USSR USSR USSR USSR USSR USSR USSR	5		NOTES NOTES
LAUNCHES  074C  07	7449 7451 7452 7453 7453 7455 7456 7450 7460 7461 7461 7465 7467 7467	USSR USSR USSR USSR USSR USSR USSR USSR		N N N N N N N N N N N N N N N N N N N	
074C 074E 074E 074F 074J 074J 074J 074J 074B 076B 076B 077B 077B 078B 078B 078B 078B 078B 078	7449 7450 7451 7452 7453 7456 7456 7457 7459 7461 7461 7463 7463 7463 7463 7463	USSR USSR USSR USSR USSR USSR USSR USSR		A SOUTH OF S	
0746 0747 0747 0741 0744 0748 0748 0748 0748 0768 0768 0768 0778 0788 0788 0788 078	7451 7452 7453 7454 7455 7456 7460 7460 7461 7463 7463 7464 7463 7464 7467	USSR USSR USSR USSR USSR USSR USSR USSR			
074E 0745 0741 0741 0744 0748 0748 0748 0768 0768 0738 0738 0738 0738 0738 0738 0738 073	7451 7452 7453 7455 7456 7459 7460 7461 7463 7463 7464 7467 7467	USSR USSR USSR USSR USSR USSR USSR USSR			
0745 0744 0744 0744 0744 0748 0748 0748 0748	7453 7454 7455 7456 7459 7460 7461 7463 7464 7465 7467 7467	USSR USSR USSR USSR USSR USSR USSR USSR			
0742 0744 0744 0744 0744 0744 0744 0748 0748	7455 7456 7456 7459 7469 7461 7461 7465 7467 7467	USSR USSR USSR USSR USSR USSR USSR USSR			
074K 074K 074N 074N 074Q 074B 076B 076B 077B 078B 078B 080B 080B	7456 7459 7459 7461 7461 7463 7463 7465 7467 7467	USSR USSR USSR USSR USSR USSR USSR USSR			
074L 074H 074N 074P 074Q 074U 074U 076B 076B 077B 077B 078B 078B 078B 078B 078B 078	7457 7459 7459 7461 7461 7463 7465 7465 7467 7467	USSR USSR USSR USSR USSR USSR USSR USSR	1 1 1 1		
0748 0748 0748 0748 0748 0749 0768 0768 0778 0788 0788 0808 0808	7459 7459 7461 7461 7463 7463 7465 7467 7467	USSR USSR USSR USSR USSR USSR USSR USSR	1 1 1 1	i	
0746 0748 0748 0748 0748 0768 0768 0778 0788 0788 0808 0808	7460 7461 7461 7463 7463 7465 7467 7467 7470	USSR USSR USSR USSR USSR USSR USSR USSR	1 1 1		
0749 0748 0748 0740 0768 0768 0778 0738 0738 0738 0808 0808	7461 7463 7464 7465 7465 7467 7470	USSR USSR USSR USSR USSR USSR	1 1	- 1	
0748 0744 0744 0758 0768 0768 0778 0778 0738 0738 0738 0738 0780 0808	7463 7463 7465 7465 7467 7467 7470	USSR USSR USSR USSR USSR USSR	1 1		
0745 0740 0740 0758 0768 0768 0778 0738 0738 0738 0808 0808	7463 7465 7465 7526 7467 7470	USSR USSR USSR USS USSR		1	
0744 0744 0758 0768 0768 0778 0738 0738 0738 0780 0780 0780	7465 7526 7467 7469 7470	USSR USSR US US		10 NUV 74	
0744 0758 0768 0778 0778 0738 0738 0808 0808	7526 7467 7469 7470	9550 US US			
0758 0768 0768 0778 0778 0738 0738 0780 0808 0808	7467 7469 7470 7471	ÛS 115CB	26 SEP	27 NOV 74	
0768 0768 0778 0738 0738 0738 0738 0730 0808 0808	7469 7470 7471	110.00		23 DEC 78	
0768 0778 0738 0738 0738 0738 0808 0808 080	7470		1	77 77	
0778 0738 0738 0738 0780 0808 0808 0806		USSK	15 001	14 MAR BO	
0788 0788 0780 0780 0808 0808	7472	Sn		13 MAY 79	
0738 0786 0780 0808 0808 0806	7473	USSR	18 001		
0780 0808 0808 0806 0800 0800	7474	USSR	18 OCT	24 OCT 74	
0780 080A 080B 080C	44.45	03311	ı		
0808 0808 080C	7470	ASSU	- 1	- 1	
- 1	7479	USSR			
	7521	USSR		2 NOV 7	
	7522	USSR	22 UCI 22 OCI	14 050 74	
1974 080E	7524	USSR			
	1527	USSR		ı	
	1528	USSR	22 OCT	24 NOV 74	
	748	ASSII			
	7494	8550	24 961	- 1	
1974 OB2A COSMUS 691	7483	USSR			
0828	7484	#\$\$A	25 06	10 VOV 74	
	7511	USSB	- 1	- 1	
1974 0820 1974 0844 LUNA 23	7491	USSR		42 NOV 9	*
948	7492	#55A	28 UCT	AC VON I	
	7695	USSA	- 1	19 MAR 75	
1974 0894 1074 0858	7498	Sn		23 JAN 80	
•	7499	Sn	1		
	1691	Sn	29 OCT	31 UCI 74	

INTER-	CATALOG COSTO S			
CNATION	NUMBER	SOURCE	LAUNCH	DECAY
			١.	•
1974 000B	7507	U558	130 te	11 NOV 74
	7508	USSR		VOV
1974 0878 COSNOS 072	7503	USSR	ADN T	
1974 0870	7504 7505	USSR	NOV I	5 NOV 74
	7506	U\$5R	NON I	<b>1</b>
	7520	USSR	1 NOV	NO.
1974 OBBA CDSMDS 693	7509	USSR	→ NOV	16 NOV 74
- 1	7510	USSR	* NOV	4
	7513	USSR	♦ NOV	[ ]
	7534	USSR	1	VOV.
1974 089BC	9818	SO	15 NOV	27 DEC 78
1974 0898V	8557	ŮS	15 NOV	28 NOF 01
1974 089CW	8559 8559	SO	15 NOV	20 JAN 78
	8787	<del>V</del>	- 1	- 1
7	8909	S	ł	•
	7535	USSR		NOV.
1974 0900	7537	USSR		
1974 090F	7556	USSR	16 NOV	30 NOV 74
0906	7557			976
	7538 7538	USSR	1	ł
	7541	USSR	- 1	LAZ Z
1974 092C	7542 7543	USSR	ADN 12	10 JAN 75
- 1	7548	US	- 1	1
1	7549	Sn		26 DEC 74
	7551	USSR	27 NOV	DEC
1974 095B 1974 095C	7553	USSR	27 NOV	29 NOV 74
	7554	USSR		956
•	7561	USSR		
1974 0966 1974 0966	7563	USSR		Τ.
	7564	USSR		96
•	7565	USSR	2 DEC	8 DEC 74
1974 098A COSMOS 697	7571	USSR		200

1974   LONG COSM   LONg COSM   LOng COSM   Long COSM	INTER-						
Continues (CONT.)   1573   USSR   13 DEC   15	DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1995   1995	LAUNCHES (CONT						
Colored   Colo			1573	USSR	_		
1006   1757   1058   13 BEC   20 BEC   1006   100	1		6883	HSSN	1		
1000   1000	1004	700	7536	USSK		טבינ סבינ	
1000	1008	240	7577	assii		201	
1000	- 1		7582	ASSU ASSU	. 1	A A	
100   100			7636	USSR	_	SEP	
100   100   1772   1058   18 0EC   20 OT   100	1		7695	USSR	.1	4	
100   100			7722	USSR		000	
1016	1		77.24	10.00	1		
1016   1577   US   15   DEC   15   FR   10   DEC   15   FR   10   DEC   15   FR   10   DEC   15   FR   10   DEC   15   FR   10   DEC   15   D			9792	0330		AUC	
101   101			9757	SN	ŀ	9 APR 7	
1010   1010	. 1		7580	30	- 1	4	
1011   1015   1016	_		7581	Sn			
101F   101F	١.		8739	Sn		- [	
1036   1037   1038			8740	SO:			
1036   1037   1038   124   104   1	ŀ		1984	¥445	ł	***	
1036   1756   1757	1020	700	7507	USSK		DCT 7	
1036   1036   124   1036   124   1036   124   1036   124   1036   124   1036   124   1036   124   1036   124   1036   124   1034   124	1038	(40	7588	ISSB 1155R		DEC	A7*
1930	- 1		7748	USSR	- 1	**	!
1936   1958   24 DEC   27 FEB   1938   24 DEC   29 JM   1938   24 DEC   29 JM   1938   24 DEC   29 JM   1934   1938   24 DEC   29 JM   1938   24 DEC   29 JM   1938   24 DEC   29 JM   1938   24 DEC   29 JM   1938   24 DEC   29 JM   1938   24 DEC   29 JM   1938   24 DEC   29 JM   1938   24 DEC   29 JM   1938   24 DEC   29 JM   1938   24 DEC   25 JM   25 JM			7749	USSR		APR	
103F   103F   1754   105K   24 DEC   1 JUN   103F   103H   1755   105H   103H   1755   105H   103H   1755   105H   103H   103H   1755   105H   103H	1		7750	HSSR	1	FEB 2	
103H	_		7754	USSR	_ 1	NOS	
103K   103K			7756	USSR	۱.	DEC 7	
103K   1756   USSR   24 DEC   16 AUG   103K   103	. 1		7257	USSR	1	120	
103H	_		7758	USSR		AUG 7	
1038	1		735.0	2247	1		
103P	_		7760	USSK	1	י ה הווו	
1034         7765         USSR         24 DEC         25 JUL           1038         7765         USSR         24 DEC         25 JUL           1035         7767         USSR         24 DEC         25 JUL           1034         1034         USSR         24 DEC         9 JUL           1034         7784         USSR         24 DEC         9 JUL           1034         7784         USSR         24 DEC         9 JUL           1034         7793         USSR         24 DEC         9 JUL           1034         USSR         24 DEC         9 JUL           1034         USSR         24 DEC         9 DEC           1034         USSR         24 DEC         21 NDV           1034B         USSR         24 DEC         22 MAR           1034B         USSR         24 DEC         10 JUN           1034C         USSR         24 DEC         10 JUN			7763	USSR		APR 7	
103R         7765         USSR         24 DEC         23 SEP           1035         7767         USSR         24 DEC         25 JUL           1031         7783         USSR         24 DEC         9 JUL           1034         7784         USSR         24 DEC         9 JUL           1034         7784         USSR         24 DEC         9 JUL           1034         7783         USSR         24 DEC         9 JUL           1034         1034         USSR         24 DEC         9 DEC           1034         1035         USSR         24 DEC         9 DEC           1034         USSR         24 DEC         26 DEC         10 UUL           1035         USSR         24 DEC         26 DEC         10 UUL           1034         USSR         24 DEC         26 DEC         10 UUL           103AB         USSR         24 DEC         10 UUL           103AB         USSR         24 DEC         10 UUL           103AB         USSR         24 DEC         10 UUL           103AB         USSR         24 DEC         10 UUL           103AB         USSR         24 DEC         10 UUL	Т		7764	USSR	1	PAG.	
1031     7767     USSR     24 DEC     9 JUL       1034     7784     USSR     24 DEC     9 JUL       1034     7784     USSR     24 DEC     9 JUL       1034     USSR     24 DEC     9 JUL       1034     USSR     24 DEC     9 JUL       1034     USSR     24 DEC     9 SEP       1034     USSR     24 DEC     26 DEC       103AB     USSR     24 DEC     26 DEC       103AB     USSR     24 DEC     27 MAR       103AB     USSR     24 DEC     27 MAR       103AB     USSR     24 DEC     10 JUN       103AF     USSR     24 DEC     10 JUN       103AF     USSR     24 DEC     10 JUN       103AF     USSR     24 DEC     10 JUN       103AF     USSR     24 DEC     10 JUN       103AF     USSR     24 DEC     10 JUN       103AF     USSR     24 DEC <td< td=""><td></td><td></td><td>7765</td><td>USSR</td><td></td><td>SEP</td><td></td></td<>			7765	USSR		SEP	
1034   1031   1784   1058   24 DEC   10 OCT   1034   103	1		1,66	****	1		
103V         7784         USSR         24 DEC         10 OCT           103M         7793         USSR         24 DEC         9 JUL           103X         7814         USSR         24 DEC         9 JUL           103X         103X         24 DEC         9 SEP           103X         8046         USSR         24 DEC         1 NDV           103AB         8048         USSR         24 DEC         26 FEB           103AC         USSR         24 DEC         26 FEB           103AC         USSR         24 DEC         20 UN           103AB         USSR         24 DEC         10 JUN           103AC         USSR         24 DEC         10 JUN           103AF         USSR         24 DEC         4 AUG			7783	USSK		30F	
1034   1035R   24 DEC   9 JUL   1035R   1035R   24 DEC   9 SEP   1035R   24 DEC   9 SEP   1035R   24 DEC   9 SEP   1035R   24 DEC   1 NDV   1035R   24 DEC   26 FEB   1035R   24 DEC   26 FEB   1035R   24 DEC   22 MAR   1035R   24 DEC   20 JUN   1035R   24 DEC   20 JUN   1035R   24 DEC   10 JUN   1035R   24 DEC   12 NDV   1035R   24 DEC   12 NDV   1035R   24 DEC   14 NDV   1035R   24 DEC   4 AUG   1035R   24 DEC   4 AUG   1035R   24 DEC   4 AUG   1035R   24 DEC   4 AUG   1035R   24 DEC   4 AUG   1035R   24 DEC   4 AUG   1035R   24 DEC   4 AUG   1035R   24 DEC   4 AUG   1035R   24 DEC   4 AUG   1035R   24 DEC   4 AUG   1035R   24 DEC   4 AUG   1035R   24 DEC   4 AUG   1035R   24 DEC   4 AUG   1035R   24 DEC   4 AUG   1035R   24 DEC   4 AUG   1035R   24 DEC   4 AUG   1035R	١.		7784	USSR	l	00.1	
103X	i		7793	USSR	ı	\[ \]	
1037         USSR         24 DEC         6 DEC           103A         8046         USSR         24 DEC         1 NDV           103AB         24 DEC         26 FEB         27 DEC         26 FEB           103AB         8048         USSR         24 DEC         26 FEB           103AC         405R         24 DEC         27 DEC         10 JUN           103AE         8050         USSR         24 DEC         10 JUN           103AE         8051         USSR         24 DEC         4 MDC           103AF         8051         USSR         24 DEC         4 AUG           103AF         8051         USSR         24 DEC         4 AUG			7814	USSR		SEP 1	
103AF 24 DEC 1 NDV 103AB 24 DEC 26 FEB 103AB 8048 USSR 24 DEC 26 FEB 103AB 8048 USSR 24 DEC 22 MAR 103AF 8050 USSR 24 DEC 12 NDV 103AF 8051 USSR 24 DEC 12 NDV 103AF 4 DEC 12 NDV	L		6662	USSR	1	T	
103AB 8048 USSR 24 DEC 22 MAR 103AB 103AF 8052 USSR 24 DEC 12 NDV 103AF 8052 USSR 24 DEC 12 NDV 103AF 8052 USSR 24 DEC 14 NDV 103AF 8052 USSR 24 DEC 4 NDV 103AF 8052 USSR 24 DEC 4 NDV 103AF 8052 USSR 24 DEC 4 NDV 103AF 8052 USSR 24 DEC 4 NDV 103AF 8052 USSR 24 DEC 4 NDV 103AF 8052 USSR 24 DEC 4 NDV 103AF 8052 USSR 24 DEC 4 NDV 103AF 8052 USSR 24 DEC 4 NDV 103AF 8052 USSR 24 DEC 4 NDV 103AF 8052 USSR 24 DEC 4 NDV 103AF 8052 USSR 8052			8046	SSS			
103AC   1040   1058   24 BEC   10 JUN   103AE   24 BEC   12 NDV   103AE   24 BEC   6 NDV   103AE   24 BEC   6 NDV   103AE   24 BEC   6 NDV   103AE   24 BEC   6 NDV   103AE   24 BEC   6 NDV   103AE   24 BEC   6 NDV   103AE   24 BEC   6 NDV   103AE   24 BEC   6 NDV   103AE   24 BEC   6 NDV   103AE   24 BEC   6 NDV   103AE   24 BEC   6 NDV   103AE   24 BEC   6 NDV   103AE   24 BEC   6 NDV   103AE	l		8048	USSR	Ι.	MAR	
103AP         3050         USSR         24 DEC         12 NDV 7           103AF         4 DEC         12 NDV 7           103AF         24 DEC         6 NDV 7           103AF         24 DEC         6 NDV 7           103AF         24 DEC         6 NDV 7	. 1		8049	USSR	4	N N	
103AF 8051 USSR 24 DEC 6			3050	USSR		NOV 7	
103AF 24 DEC 4			8051	USSR	1	L	
7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			8052	USSR	φ.		

DECAYED UBJECTS

DESIGNATION NAME	NUMBER	SOURCE	LAUNCH	DECAY
1974 LAUNCHES (CONT.)				
•	8057	USSR		NOV
1974 103AJ 1974 103AK	1018 9100	USSR		20 SEP 75
	9102	USSR		**
1974 103AM	8103	USSR		I
L	8105	CSSR		AVH
	6018	USSR		24 SEP 75
1974 103AS 1974 103AI	8113	USSR		15 JUL 78
1974 103AU	8115	USSR		
	0116	USSR		*
1974 103AY	0110	USSR		19 JUN 70
1974 103AZ	8119	USSR		NO.
	81221	USSR		E C
	7591	USSR		- 1
' '	7595	USSR		DEC \$
1974 104E	7608	USSR		29 APR 75
	7620 7630	USSR		PR
]	7656	USSR		APR
	7658	USSR		3
	7662	USSR	26 DEC	
	7995	USSR		SEP
	7997	USSR		HAR
1040	8055	USSR		5
	7597	USSR		N A A
_	7600	USSR		N X
- 1	7602	USSR		15 JAN 75
1974 1066	7603	USSR		15 JAN 75

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NATIONAL		20 (414)				
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1975 LAUNCHES (CD	(CONT.)					
1975 0018		7605	USSR	10 JAN	NAD	
		7610	USSA	NAL OL	AAA	
1975 0010		7613	USSR	10 JAN	APR	
1975 OCIF		7622	USSR	10 JAN	24 OCT 75	
- 1	***************************************	7633	USSR	10 JAN	A P.R	
		7635	USSR			
1975 002A COCMOS	06 202	7404	8330	77.	# 3	
0028		7607	4550 4530	ᅩᅥ	25 JAN 75	
002C		76097	USSR		JAN	
₩ 99	COSMOS 703	7611	USSR	- 1	A P	
1975 0038		7612	USSP	21 JAN	AUG	
_		8677	US	22 JAN	14 SEP 79	
1975 004H		8680	Sh	- 1		
_		8683	Sn		APR	
1975 004K		8684	377			
ł		6067	50 311	22 JAN 22 IAN	18 FEB //	
		8693	Sn	•	AUG	
1975 0041		8937	SU	22 JAN	20 NOV 78 9 DEC 79	
000 5261		8638	SU.	- 1	4	
1975 004V	:	8939	S	-		
1975 004Y		8942	US	22 JAN	26 SEP 81	
- 1		8943	Sn	- 1	3	
1975 004AA		8944 840a	S 0	22 JAN 22 JAN	18 FEB 80	
		8946	SN	22 JAN	3	
		9947	30	1	4	
1975 0044E		8948	c on	22 JAN 22 JAN	10 AUG 81 6 APR 79	
		8950	S	•	DEC	
1975 004AM		8955	Sn	22 JAN	Š	
- 1		9957	30	- 1	ğ	
		1968	Sn	-	APR	
1		8965		1	29 056 79	
1975 004AX		6767 9044	80			
		8971	Sn	22 JAN		
1975 0648E		8973	S S	22 JAN 22 JAN	13 JAN 80	
- 1		8974	\$f)	- 1	**	
		8975	Sn.	22 JAN	SEP	
1975 00483		8976	S	22 JAN	21 MUN 12	
		\ \_X				

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DESIGNATIUN	NAME	NUMBER	SOURCE	LAUNCH	DEÇAY	NOTES
1975 LAUNCHES (CONT						
1975 004BR		8983	Sn	22 JAN	SEP	
1975 00485		3985	Sn	22 JAN	- 1	
_ 1		8987	US US		E	
1975 0048X		8989	Sn	22 JAN	- 1	
1975 0048Y		<del>899</del> 92	Sn Sn		•	
1975 004CC		8994	Sn	22 JAN 22 JAN	24 MAR 79	
		9001	58 88			
		9002	SA		┇╬	
1975 004CP		9805	95	22 JAN	56 DEC 80	
		9026	SO		VON	
1975 004CS		9028	SO SO	1	AVH	
1		9030	US S		ł	
1975 004CV		9032	SO	22 JAN	4 FEB 77	1018
		9034	SO			
1975 00402		9036	C C C			
_ 1		9038	SO	1		ian Iau
		9041	SO	1	SEP	SI 3
1975 004DJ		9283	SO		2 DEC 79	
		9285	S		NAL	
		9287 9287	S.O.		20 APR 79	
		9289	Sn		NAC	
		9291	SS		30 JUN 80	
1975 0040W		9295	Sn		NAC	
1975 0040X		9297	US		NAC	
ı		9299	US C	NAC 22	30 JUN 78	
1975 00458		9301	118		A C	

DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1975 LAUNCHES (CONT.)	1.)					
1		9303	Sn	1		
1975 004EH		9306	ŜN NS	22 JAN	21 DFC 80	
		9307	Sn	- 1	3	
		9308	Sn	•	MAY	
1975 004EM		9310	Sn	22 JAN	7 JUL 77	
- 1		9311	30	- 1	3	
		9312	Sn:	•		
1975 004ES		9315	Sn	22 JAN	13 FFB 79	
- 1		9316	90	- 1	4	
		9317	Sn:	22 JAN	APR	
1975 004FW		9319	511	22 JAN	2 × 4 ×	
		9321	\$ D	- 1	- 1	
		9322	Sn	•	A P.R.	
1975 00456		9324	30	i	d 35	
- 1		7525	60	22 JAN	17 400 78	
		9327	Sn		MAR	
1975 004FF		9543	37	ŀ	≱;	
- 1		7544	0.0		12 HAY 79	
		1456	NS	22 JAN	JAN	
1975 004FL		9548	30	1		
- 1		7247 9660	03	22 JAN	14 ADP 79	
		9571	SN			
		9616	30	22 JAN	-1	
1975 004FT		9618	ວິດ		31 OCT 80	
l _		9677	Sn	7	Š	
ᆙ		9678	30	- 1	1	
1975 00468		9680	Sn s	22 JAN	17 JUL 79	
1975 004GF		9684	SN	ľ	FEB	
		9896	31		1	
_		1996	Sn	-	NO	
1		9896	<del>S</del> n	ł	SEP	
		0696	S	22 JAN	6 JUN 80	
1975 004GP		9705	SO US	Ι.	Ī	
- 1		9306		- 1	990	
		9707	Sn	-		
1		9708	\$0	1	***	
1975 00461		9709	0.5	22 JAN 22 JAN	12 MAK 78	
		3713	SP			

DESIGNATION NAME	CATAL BG NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1975 LAUNCHES (CONT.)					
	9715	US	- }	MAY	
- 1	9716 9717	S OS	22 JAN 25 JAN	R	
	9950	SO SO	1	- 1	
	7617	USSR	- 1	- 1	
i	7619	USSR	23 JAN	JAN	
1975 005E	7621	USSR	23 JAN	26 JAN 75	
1975 005F	7631 7632	USSR	NAC 62	6 FEB 75	
1975 005H	7644	USSR WSSR	NAP 62	#	
- 1	7623	USSR	•	<b>*</b>	
1975 005B	7624	USSR	28 JAN	25 JUN 75	
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1975 018C	7693	USSR	12 MAR	15 MAR 75	
1975 0180 1975 018F	7702	USSR	12 MAR	26 MAR 75	
- 1	7703	USSR	- 1	347	

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DBCAY	NOTES
1975 LAUNCHES	S (CONT.)					
1	COSMOS 720	7696	USSR	1 .	Į.	
•		7697	USSR	-1	AAR	
1975 0190		7698	USSR	21 MAR	22 MAR 75	
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1975 0196		7717	USSB USSB	21 MAR	A APR 75	
- 1		7725	A220	. [		
	* * * * * * * * * * * * * * * * * * *	7726	USSR		9 APR 75	
1975 0208		7706	USSR	26 MAR 26 MAB	20 MAR 75	
- 1		7107	4550 433H	ا د	MAD	
		7708	USSR			
1975 0205		7721	1330 1330		2 2 2 2	
	COSMOS 722	7709	ASSU USCB	23 MAD	10 APK 75	
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1975 0210		7716	85511		29 MAR 75	
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		7729	USSR		•	
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	INTERCOSMOS 13	7710	assn	- 1	033	
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1975 024C		7796	USSR	2 APR	19 MAY 75	
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1975 024E		7798	USSR	2 APR	24 HAY 75	
1		7922	USSR	7	7 AUG 75	
		7923	USSR	•	3	
1975 026A	COSMOS 725	7730	USSR	8 APR	6 JAN 76	
		10729	Sn	9 APR	DEC	
1975 0298		7740	MSSN MSSN	14 APR	20 JUN 75	
- 1	COSMOS 727	3762	955D	- 1	٠ ٦	
		7743	USSR		APR	
1975 030D		7774	USSR	16 APR	5 MAY 75	
		7775	USSR	- 1	NAY 7	
1975 031A	COSMOS 728	7745	USSR	18 APR	29 APR 75	
ŀ		7751	USSR			
1975 031E		1776	USSR	18 APR	3 MAY 75	
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		2777	USSR	-	16 MAY 75	
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	YAY		USSR	7819	1000	1975 0448
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	HAY.		USSR	7813		1975 0410
	30 MAY 75	21 MAY	USSR	7811		
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	YAH	•	USSR	7785		1975 035E
	1 MAY 75	24 APR	USSR	7772		
	29 APR 75	1	USSR	7771		- i
	YAH		USSR	7770	COSMOS 730	1975 035A
	12 MAR 78	19 APR	USSR	8058		
					S (CONT.)	1975 LAUNCHES
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10N NAME  NCHES (CONT.)  1 COSMUS 740  COSMUS 742  COSMUS 742  COSMUS 742  COSMUS 742  COSMUS 742  COSMUS 742  COSMUS 742  COSMUS 742  COSMUS 742  COSMUS 742  COSMUS 743  COSMUS 743  COSMUS 744  COSMUS 744  COSMUS 744  COSMUS 746  COSMUS 746  COSMUS 746  COSMUS 746  COSMUS 746  COSMUS 746  COSMUS 746  COSMUS 746  COSMUS 746  COSMUS 746  COSMUS 746  COSMUS 746  COSMUS 746  COSMUS 746	MATIONAL		CATA1 OC				
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0490C         17904         USSR         5 JUN         16 JUN           0490C         0490C         USSR         8 JUN         9 JUN           0490C         0490C         USSR         8 JUN         9 JUN           0490C         0490C         USSR         8 JUN         9 JUN           0490C         0490C         USSR         8 JUN         9 JUN           0490C         0490C         USSR         8 JUN         9 JUN           0490C         0490C         USSR         8 JUN         9 JUN           0490C         0490C         USSR         12 JUN         10 JUN           0490C         0490C         USSR         14 JUN         10 JUN           0490C         0490C         USSR         14 JUN         14 JUN         14 JUN           0490C         0490C         USSR         14 JUN         14 JUN         14 JUN         14 JUN           0490C         0490C         USSR         14 JUN <td></td> <td></td> <td>7951</td> <td>USSR</td> <td></td> <td>L NOT</td> <td></td>			7951	USSR		L NOT	
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0534         COSMOS 743         1925         USSR         12 JUN         25 JUN         25 JUN         26 JUN         26 JUN         26 JUN         29 JUN         20 JUN         20 JUN         20 JUN         20 JUN         20 JUN <td></td> <td></td> <td>7919</td> <td>SN SN</td> <td>ł</td> <td>₹₹</td> <td></td>			7919	SN SN	ł	₹₹	
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0530         7972         USSR         12 JUN         29 JUN           053E         7981         USSR         12 JUN         26 JUN           053E         7987         USSR         12 JUN         26 JUN           054C         7954         USSR         14 JUN         15 JUN         26 JUN           054C         7954         USSR         14 JUN         15 JUN         26 JUN           054C         795A         USSR         21 JUN         25 JUN         27 JUN         20 JUN         20 JUN         20 JUN         20 JUN         20 JUN         20 JUN         20 JUN         20 JUN         20 JUN         20 JUN         20 JUN         20 JUN         20 JUN         20 JUN         20 JUN         20 JUN         20 JUN			7926	USSR		3	
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054C         USSR         14 JUN         15 JUN           054B         USSR         24 JUN         25 JUN           057B         COSMUS 745         7982         USSR         24 JUN         25 JUN           059B         COSMUS 746         7985         USSR         24 JUN         14 NOV           059B         COSMOS 746         7985         USSR         25 JUN         14 JUN           059B         USSR         25 JUN         14 JUN         26 JUN           059B         USSR         25 JUN         1 JUN         26 JUN           059B         USSR         25 JUN         26 JUN         26 JUN           059B         USSR         25 JUN         26 JUN         26 JUN           059B         USSR         25 JUN         26 JUN         26 JUN           059B         USSR         27 JUN         27 JUN         29 JUN           050B         USSR         27 JUN         27 JUN         29 JUN           050B         USSR         27 JUN         27 JUN         29 JUN           050B         USSR         27 JUN         29 JUN         27 JUN         29 JUN           050B         USSR         27 JUN         29 JUN			7950	ASSU.	- [	- 1	
057B         DESCRING CRANDS 745         7971         USSR         21 JUN         9 APR           058B         COSMUS 745         7983         USSR         24 JUN         14 NOV           059B         COSMUS 746         7985         USSR         25 JUN         1 JUL           059B         USSR         25 JUN         1 JUL         26 JUN           059C         USSR         25 JUN         26 JUN         26 JUN           059C         USSR         25 JUN         26 JUN         26 JUN           059C         USSR         25 JUN         26 JUN         26 JUN           059F         USSR         25 JUN         26 JUN         26 JUN           059F         USSR         25 JUN         26 JUN         27 JUN           060B         USSR         27 JUN         27 JUN         27 JUN           060B         105SR         27 JUN         27 JUN         29 JUN           060B         105SR         27 JUN         27 JUN         27 JUN           060C         105SR         27 JUN         27 JUN         27 JUN           060C         105SR         27 JUN         27 JUN         27 JUN           060C         105SR	0540		7954	USSR			1
058A         COSMUS 745         7983         USSR         24 JUN         12 MAR           059B         COSMUS 746         7983         USSR         24 JUN         14 NDV           059B         COSMUS 746         7986         USSR         25 JUN         1 JUL           059B         USSR         25 JUN         25 JUN         26 JUN           059C         USSR         25 JUN         26 JUN           059F         USSR         27 JUN         3 JUL           060B         USSR         27 JUN         3 JUL           060B         USSR         27 JUN         3 JUL           060C         USSR         27 JUN         29 JUN           060C         USSR         27 JUN         29 JUN           060C         USSR         27 JUN         29 JUN           060C         USSR         27 JUN         27 JUN           060C         USSR         27 JUN         9 JUL           060C         USSR         27 JUN         17 JUN <td>0578</td> <td></td> <td>7971</td> <td>Sn</td> <td></td> <td>APR</td> <td>ŧ</td>	0578		7971	Sn		APR	ŧ
USSR         COSMUS 746         1985         USSR         25 JUN         1 JUL           059B         USSR         25 JUN         25 JUN         25 JUN         26 JUN           059B         USSR         25 JUN         26 JUN         26 JUN           059B         USSR         25 JUN         26 JUN         26 JUN           059F         USSR         25 JUN         26 JUN         26 JUN           059F         USSR         27 JUN         9 JUL           060B         USSR         27 JUN         3 JUL           060B         USSR         27 JUN         29 JUN           060B         USSR         27 JUN         27 JUN           060B         USSR         27 JUN         27 JUN           060B         USSR         27 JUN         27 JUN	48€0	US 745	7982	8330	1		
059B         1986         USSR         25 JUN         26 JUN         27 JUN         3 JUL         3 JUL         3 JUL         3 JUL         3 JUL         3 JUL         27 JUN         3 JUL         27 JUN         3 JUL         27 JUN         29 JUN         29 JUN         3 JUL         20 JUN         20 JUN <t< td=""><td>0594</td><td>246</td><td>7985</td><td>SSS</td><td>- 1</td><td>٠,</td><td></td></t<>	0594	246	7985	SSS	- 1	٠,	
059D         USSR         25 JUN         26 JUN           059D         USSR         25 JUN         26 JUN           059E         059E         25 JUN         25 JUN           059F         059F         058R         27 JUN         9 JUL           060B         7991         058R         27 JUN         3 JUL           060B         7991         058R         27 JUN         29 JUN           060B         7993         058R         27 JUN         2 JUL           060B         7994         058R         27 JUN         2 JUL           060B         055R         27 JUN         29 JUN           060B         055R         27 JUN         29 JUN           060F         105SR         27 JUN         29 JUN           060F         055R         27 JUN         29 JUN           060F         055R         27 JUN         3 JUL         10 JUL           060F         055R         27 JUN         3 JUL         10 JUL           060F         060F         060F         060F         060F           060F         060F         060F         060F         060F           060F         060F         060F	0598		7986	USSR		•	
059E         9011         USSR         25 JUN         12 JUL           050A         CBSMBS 747         7990         USSR         27 JUN         9 JUL           060B         1790         USSR         27 JUN         3 JUL           060B         7991         USSR         27 JUN         28 JUL           060B         7992         USSR         27 JUN         29 JUL           060B         7993         USSR         27 JUN         29 JUL           060F         7994         USSR         27 JUN         29 JUL           060F         8013         USSR         27 JUN         17 JUL           060F         B014         USSR         27 JUN         17 JUL           060F         USSR         27 JUN         27 JUN         29 JUL           060F         B014         USSR         27 JUN         27 JUN           060F         B014         USSR         27 JUN         3 JUL           060F         USSR         27 JUN         3 JUL         10 JUL			7989	USSR	4	Š	
059F         6012         055K         23 JUN         7 JUN         9 JUL           060B         060B         7991         055K         27 JUN         3 JUL           060B         7993         055K         27 JUN         2 JUL           060B         7993         055K         27 JUN         2 JUL           060B         7994         055K         27 JUN         2 JUL           060C         17994         055K         27 JUN         2 JUL           060C         055K         27 JUN         17 JUL           060C         055K         27 JUN         17 JUL           060C         055K         27 JUN         17 JUL           060C         055K         27 JUN         9 JUL           060C         055K         27 JUN         9 JUL           060C         055K         27 JUN         9 JUL           060C         055K         3 JUL         16 JUL           060C         055K         3 JUL         16 JUL	- 1		8011	NSSU	1	1	
060B         1991         USSR         27 JUN         3 JUL           060B         7992         USSR         27 JUN         28 JUN           060B         7993         USSR         27 JUN         2 JUL           060F         7994         USSR         27 JUN         29 JUN           060F         8013         USSR         27 JUN         17 JUL           060F         8014         USSR         27 JUN         9 JUL           061A         USSR         27 JUN         9 JUL           060F         USSR         3 JUL         16 JUL           10         10         10         10           10         10         10         10           10         10         10         10           10         10         10         10           10         10         10         10           10         10         10         10           10         10         10         10           10         10         10         10           10         10         10         10           10         10         10         10           10 <t< td=""><td>059F</td><td>747</td><td>2000</td><td>1558 1558</td><td></td><td>- 1</td><td></td></t<>	059F	747	2000	1558 1558		- 1	
0600         1993         USSR         27 JUN         2 JUL           0600         1994         USSR         27 JUN         29 JUN           0601         1050         USSR         27 JUN         17 JUL           0605         1050         USSR         27 JUN         17 JUL           0606         1050         USSR         27 JUN         9 JUL           0614         1050         USSR         3 JUL         16 JUL           0614         1050         USSR         3 JUL         16 JUL	060B		7991	USSR		•	
063E         17994         USSR         27 JUN         17 JUL           063F         27 JUN         17 JUL         17 JUL         17 JUL           060C         USSR         27 JUN         9 JUL         9 JUL           061A         CDSMDS 748         8006         USSR         3 JUL         16 JUL			7993	USSR		70F	
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ni ∀d	550		PRE	8053	MAU 3	٠,
) I		24 JUL	USSR	8044		
א יר	1		WS5R-	<del>8043</del>	COSMOS 752	- 1
AV OC		23 JUL	USSR	8041		
)d	5		#\$58	8040	COSMOS 751	1
310	28 IIII 76	17 JUL	USSR 7	8045		•
10 10	VEP	17 JUL	15.50	9030	1	1
5	\$		93311	3400	CUSMUS 750	1975 0674
		15 JUL	C V	8033		1975 0666
<b>₽</b> 0‡	- 1	- 1	95	2508	אויטננט וס	
		15 JUL	USSR	8031		
<b>8C</b> +	1	1	U55R	0630	50702 19	- 1
			USSR	8017	1	-
	1	1	## ## ## ## ## ## ## ## ## ## ## ## ##	9016		1975 0638
	27 AHG 81	<b>4</b> 4	CISSR	8107		1975 062C
	SEP	4 JUL	COUX	8010	201100	1
	4	300	USSK USSK	8009	COCHOC 7A9	1975 0624
		3 JUL	USSR	8029		1975 061E
	4		855B	8628		- 1
	15 JUL 75	3 JUL	USSR	8008		1975 0610
					(CONT.)	1975 LAUNCHES
NOTE	DĘCAY	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION
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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1975 LAUNCHES (CONT.)	47.)					
1		8203	USSR	5 SEP	9 SEP 75	
1975 080H		8205	USSR	5 SEP	SEP	
- 1		8206	USSR	<b>5</b> SEP	9 SEP 75	
		8207	USSR	5 SEP	9 SEP 75	
1975 080M		8209	USSR	5 SEP	ĺ	
- 1		8210	USSR	1		
		8211	USSR	S SEP	9 SEP 75	
1975 0000		8616	ASSI	5 CED	ı	
- 1		9219	ASSU BSSU	S SEP	- 1	
		8215	USSR	5 SEP	9 SEP 75	
- 1		8216	NESR	<b>633 5</b>		
		8217	USSR	S SEP	9 SEP 75	
1976 000×		0210	ACCO.	4 CED	9 CED 75	
1915 080A		8217	A550	5 550		
		8221	USSR	5 SEP	9 SEP 75	
ı		8223	USSR	433		
_		8223	USSR	5 SEP	9 SEP 75	
1975 OHOAD		8225	USSR	5 SEP	9 SEP 75	
- !		8226	USSR	\$ 56.0	9 SEP 75	
		8227	USSR	5 SEP	9 SEP 75	
ı		82.28	233		35 035 0	
		8229	U33K	2 3EF	9 SEP 78	
1975 080AK		8231	USSR	5 SEP	9 SEP 75	
- 1		8232	USSR	5 SEP	- 1	
UBOAM		8233	USSR	SSEP	9 SEP 75	
1975 080AN		8235	USSR	5 SEP	9 SEP 75	
1		8236	USSR	6 SEP	9 SEP 75	
		8237	USSR	5 SEP	9 SEP 75	
ļ		8238	XXX	5 CED	9 SED 75	
_		9237	ACCO.	5 550	- 1	
1975 080AV		8241	USSR	5 SEP		
- 1		8242	USSR		1	
		8243	USSR	S SEP	9 SEP 13	
1975 08047		8245	USSR	5 SEP	_	
- 1		8246	USSR	9 269	8 559 75	
		8247	USSR	5 SEP	9 SEP 75	
1		8248		1	0 000 75	
		8249 0 m c n	USSK	7 SEP 6 SEP	- 1	
1975 0808E		8251	USSR	l _	9 SEP 75	

	TO TAT 10		73300			
	•		ED ANCE	אר ה הרונה הרונה		
	30 MAR 82	27 SEP	FRANCE	8333		1975 0926
	569		RANCE	6332	O	20 4240
		25 SEP	USSR	8356	•	090D
X	7		USSR	0355		1975 0900
	SEP		USUR	8328		0908
	1		1558	6327	COSMOS 771	090A
<i>DI</i>			9250	8349		
	ĺ		COUR	2260	;	
	- 1		115 CD NC CD	9323		1975 088A COS
JA RC	SEP		USSR	8335		1
	4		USSR	8334		ı
			USSR	8284		
			USSR	2928		1975 0858
	30 SEP 75		USSR	8281	:0SM0S 760	085A C
			4660	956		
			LISSR	8324		
	) / E		COUX	07.70		1975 0846
			USSA	1120		1975 DAAD
			USSR	8276		ı
			USSR	6775	CUSMUS 139	00 <b>4</b> A
•	SEP		US	9408		083C
			## 5558	0196		- 1
	- 1		8551	8196		
			CUUX	0200		1
	4		9338	8280		1975 G80CD
	SEP		USSR	8271		
	567		HS5R	8276		- 1
	SEP		USSR	8269		
	5		US5R	8268		- 1
	SEP		USSR	8267		1975 0808X
	0 SEP 35		W\$5R	9566		1
			9331	8265		
	SEP		USSK	6263		1
	5		US58	8163		1975 08083
	SEP	5 SEP	USSR	8261		
						- 1
	SEP		USSR	8259		1975 080BP
	֓֞֝֜֝֓֜֝֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֡֓֓֓֓֡֓֓֓֓֓֡֓֡֓֡֓֡		USSR	6250		1975 0808N
	0 SED 75			8257		
	) P		COUR	0233		
	4		1355B	9366		1975 OBOBK
	SEP		USSR	8253		1975 0808H
					(CONT.)	1975 LAUNCHES (C
NOT	OĘCAY	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION

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DE SIGNATIUN	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1975 LAUNCHES (	(CONT.)					
		8341	FRANCE	i	SAN	
1975 0926 1975 093A CD	COSMOS 772	8338	USSR	27 SEP 29 SEP	20 NOV 79 2 OCT 75	
8660		6339	USSR	- 1	130	
095A	COSMOS 774	8345	USSR	1 OCT	15 OCT 75	
1		8350	USSR	1 001	00.1	
- 1		8351	USSR	1 001	片	
1975 095E		8362	USSR	1 001	14 OCT 75	
1		8365	USSR	1 OCT	14 OCT 75	
₩960	EXPLORER 54	8353	3ñ	190 9	12 HAR 76	
_		8354	SU	6 OCT	1 APR 76	
1975 097C		8359	USSR	8 OCT	1	
1975 0970		8414	USSR	8 061	MAR	
		8360	S	9 001	30 NOV 75	
1975 099C		8409	SN		1	
- 1		8410	30	12 061	*	
1975 100B		8367	SD SD	16 001	11 NOV 75	
100E		8372	Sn			
1975 101A CB	CUSMUS 176	8370	USSR	17 OCT	23 OCT 75	
- 1		8373	USER	- 1	- 1	
		8412	USSR		1 NOV 75	
1975 102A CD	COSMOS 777	8416	USSR	•	L _	į
1975 1628		8417	USSR	29 BCT 29 DCT	4 DEC 76	4
1975 1620		8623	USSR	- 1	T	
•		8624	USSR	29 OCT	15 NOV 76	
1975 1026		8626	USSR		_	
1975 102H		8627	USSR	29 00	15 NOV 76	
- 1		0.700	A22U		Š	
		8630	USSR			
1975 102M		8631	USSR	29 OCT	20 JUL 77	
ŀ		8633	USSR	- 1	- 1	
_		8634	USSR		4 DEC 76	
1975 162R 1975 102S		8636	USSR			
- 1		8637	HSSN.	1	1	
		8638	USSR	29 OCT	14 MAK 16	
1975 102W		8640	USSR	1	15 NOV 76	
		i .	,			

<b>†</b>							
			055R	8430	50702 20		1975 1064
	DEC		USSR	8427			
	9	14 NOV	USSR	8426		58	1975 1058
	VOV		USSR	8429		<b>\$</b> 0	1975 1040
	\$	**************************************	US5R	0428		7	ı
	VOV	◆ NOV	USSR	8422			
	1	+ NOV	USSR	8420	COSMOS 779		L.
	NOV		USSR	9563		10280	
	¥ :	<b>b</b> 6	1000	726		10201	l
	A D R	130 62	8551	8735		LOZON	1975 10
	B JAN //		USUK	8733		TAZAL	_
	4	9	055K	0132		VAZON	ŀ
		29 OCT	USSR	8731		102BJ	
	4	\$	U55R	0730		10281	- 1
人 Si		29 OCT	USSR	8729		10286	
	**	29 867	USSR	0720		7850	1
J₽ 3E	YON		USSR	8727		102BE	_
	3	# 1	#358	9726		0280	Ι.
	DR €		USSR	8725		102BC	
R	IN ATK	30 OC 1	COUR	6218		ARZOA	101 5/61
Ai O	956	g	227	2710		LOZAZ	
Oc NI:			USSR	8721		102AY	L
4 91)	100	#	USSR	8720		102AX	ŀ
)E	DEC	29 OCT	USSR	8719		102AH	
) )		# :	USSA	8718		A 4 20	Ι.
			USSR	8717		102AU	
		20 001	6007			10030	ŀ
	0 EEB 77	29 061	HCCO	8715		NAZO	1975 10
	APR	29 OCT	USSR	8713		102AQ	
	*	\$	035K	2110		14.20	- 1
			USSR	8711		102AN	
	#		WS5R			102 AM	1975 10
	OCT	29 OCT	USSR	8656		102AL	
	¥	#	USSR	8655		T02#	1
	NOV	29 OCT	CSSR	800 V		102AJ	
	13 DCC 76		HAAD	2698		TOZAG	1076 100
		3	NCCO NCCO	1600		18.20	
	I A		USSR	8650		102AE	
	18 JUN 77	29 BCT	USSR	8649		08201	
	APR		USSR	8648		102AC	
	<b>₩</b>		USSR	8647		62 AB	1975 10
		29 OCT	USSR	8644		102AA	
		#	W258	8643		1627	J.
	15 NOV 76	29 OCT	USSR	8642		24	1975 1024
•					(CONT.)	LAUNCHES (C	1975 LA
NOTES	DEÇAY	LAUNCH	SOURCE	NUMBER	NAME	TION	DESIGNATION

1975 115F 1975 116B 1975 116C 1975 116C 1975 117C

1975 118

30 MAY 82

BG≠		5 FE8	USSR	8659		1976 0128
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	dA		0558	0020	דחס כחשנים	WZIO OICI
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	n d	29 IAN	2000	8619		
		•	1000	96.1		1974 0096
	11 SEB 76	70 IAN	NOCO	9617	לפאנטטן	1976 0098
	100			0000	Encuse 300	•
			- CO C Z	B 600 4	200100	
	2		6007	0.00%	CHANGE 700	1
	0 APR	22 JAN		2503 2006 2006		
	MAT	ľ	LCCB	0270		1710 0010
		- 1	911	9500		
	14 FEB 76	17 JAN	CS	8586		
	\$	- 1	U558	05-50		
	LAX	7 JAN	USSR	8589		
	d *		USSR	8588		
	LAN	7 JAN	USSR	8553		
	4		W65R	8552		
	LAN	7 JAN	USSR	8551	CUSMOS 788	1976 002A
	4		USSR	9830		976 001K
		6 JAN	USSR	7.686		
	#		USSR	9792		976 001H
	DEC	O JAN	USSR	9791		1976 0016
	ŧ	1	WSSR	9790		1376 8817
			USSR	9731		1976 001E
	***	1	USSR	<del></del>		1976 0010
	DCT	6 JAN		8549		
	12 056 00	L	4007	953	ı	
	DEC 8	6 JAN	USSR	8530	COSMOS 787	1976 001A
					S	1976 LAUNCHES
	NAL	30	USSR	8527		1975 125E
	#	串	USSR	9520		1975 1250
		27 DEC	USSR	8525		-
		# 2	#258 	9521		
	1		CSSR	8515		
	750	9 6	T-0-2	9514		ı
			85511	8512		
		90	C S S S	051		1171 516
	1	#	HS SB	8493		- 1
	DEC		USSR	8528		
		#		8524		1975 1200
	LA	30	USSR	8523		
	27 DEC 75	2 2	USSR COUR	8490	1	
	3	2 4	11000	8448	COSMOS 786	
		30	PRC	8488	MAO 5	1975 119A
					S (CONT.)	1975 LAUNCHES
NOTES	DĘCAY	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION
				CATALOC		

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DESIGNATION	NAM	NUMBER	SOURCE	LAUNCH	DBCAY	NOTES
1976 LAUNCHES	(CONT.)					
1976 0120		8661	USSR	5 FEB		
- 1		8662	HSSN		<b>1</b> 5	
1976 012F		8663	USSR	5 FEB	11 OCT 76	
1976 012H		8665	USSR	5 FEB		
1976 0124		8666	USSR	5 668	18 MAR 76	
		8 <b>99</b> 8	955N	6 558	3	
		6998	USSR	5 FEB		
		86.70	ASSI	4 C	28 IIII 76	
1970 CIEP		100	assn assn	- 1		
		8673	USSR	5 FEB	•	
<del></del>	ı	8674	HSSB.	1	3	
013A	CDSMOS 802	8681	USSR	11 550	25 FEB 76	
1976 013C		8706	USSR			
- 1		8707	USSR		29 FEB 76	
		8708	USSR		FEB	
		9699	90011	12 558	9 DEC 81	
1976 0140	COCMOS 204	9630 9696	8550	- 1		
0158		8695	USSR			
1976 016A		8696	\$11 \$11	19 FEB	16 MAR 76	
		9304			4	
017E		8705	Sn		_	
1976 018A	CDSM05 805	8700	USSR	20 FEB	27 FEB 76	
		8703	USSR	- 1	FEB	
020A	CUSMOS 806	8737	USSR	10 MAR	23 MAR 76	
1976-0200		8768	USSR		MAR	
1976 0200		6926	USSR		MAR	
		8771	USSR	10 MAR	25 MAR 76	
1976 0218		8743	USSR	Ĺ.	APR	
		8750	30	1	4	
	COSMOS 809	8758	USSR		30 MAR 76	
		8750	ASSU.	18 MAR	19 MAR 76	
1976 0250		8761	USSR	- 1	MAR	
	MOLNIYA 1-34	8762	USSR		14 MAY 85	
1976 0268		8767	USSR	19 MAR	7 HAY 76	
- 1		8792	USSR	- 1	- 1	
		8770	Sn			
	COSMUS 810	8772	U55R	26 MAR	- OT WAY R	
		,,,,				

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DĘCAY
1976 LAUNCHES	HES (CONT.)				
_ :		8797	USSR	26 MAR	10 APR 76
1976 0298		8775 8775	US	- 1	DE \$
	COSMOS B11	8781	USSR	31 MAR	1
		8783	USSR	31 MAR 31 MAR	13 APR 76
		8804	USSR	31 HAR	1
1976 030F	COSMOS 812	8794	USSR	6 APR	30 OCT 80
1976 0316 1976 031C		9836	USSR	6 APR	
ı	COSMOS 813	8801	USSR	9 APR	27 FEB 78 21 APR 76
- 1	COSMOS 814	8806	USSR	13 APR	13 APR 76
		8809	US US		30 MAY 76
ļ i	COSMOS 815	8811	USSR	28 APR	
		8815	USSR	- 1	•
1976 036E		8817	USSR		3
		8831	USSR	1	YAH
1	9T8 SONSOO	8812	USSR		ě.
1976 0370		8885	USSR		چ
		9396	USSR		. 1
		9428	USSR		
		9430	CSSR		AUG OUG
1976 037L		9432	USSR	- 1	SEP
		9475	USSR		das
		9485	USSR	28 APR	28 OCT 77
1976 C378		9407	USSR	- 1	
		9489	U558		4
1976 037V		9507 9507	USSR	28 APR	15 SEP 77
		9508	USSR		

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1976 LAUNCHES (COI	(CONT.)					
1		9512	USSR	ľ	3 SEP 77	
1976 037AA		9514	USSR	28 APR	17 OCT 77	
₩040	COSMOS 817	8823	USSR		MAX	
		8824	USSR	S KAY	10 MAY 76	
1976 0400		8848	USSR	1	24 MAY 76	
		6900	8330		1	
1976 040F		885U 8834	USSB	2 MAY	10 HAT 70	
		8837	USSR		_	
1976 041E COSMUS	US 818	8851	USSR	18 MAY	7 HAR 77	
6448	- 1	8852	USSR		- 1	
1976 045A COSMOS	0S 819	8853	USSR	20 MAY	1 JUN 76	
		8855	USSR		MAY	
<del>1976-046A COSMOS</del> 1976-046B	05 820	8856	USSR	21 MAY	24 MAY 76	
		9966	USSB	- [	¥	
		8869	USSR	21 MAY	4 JUN 76	
1976 048A CUSMUS	05 821	8862	USSR	•	3	
1976 0488 1976 048C		8863	USSR	26 MAY	2 JUN 76	
1976 6480		8875	488A	26 MAX	0 HIN 76	
1970 U48E		97.68	835D		3	
	US 822	8865	USSR	28 MAY	8 AUG 78	
l	05 824	8877	USSR	T .	N S	
1976 052C		8880	USSR		ľ	
1976 0520 1976 052E		8881 8905	USSR	7	27 JUN 76	
1976 052F 1976 052G		890 <b>8</b>	USSR	1	35	
1976 0538		3887	Sn	10 JUN	2 JUL 76	
		8888		ŀ	<b>*</b>	
1976 053E	COCMOC 222	8902	85511	NOC 01	1 JUL 76 29 JUN 76	
8550 0558		8899	USSR	•	NOC N	
L .		8901	USSR		N S	
l _		3921	USSR	ĺ	1	
1976 0556 1976 0564 INTE	INTERCOSMOS 15	8926	USSR	19 JUN	18 NOV 79	

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DESIGNATION NAME	NUMBER	SOURCE	LAUNCH	DEÇAY	NOTES
1976 LAUNCHES (CONT.)					
	8911	USSR	22 JUN	AUG	
	8913 8913	USSR	. 1	. T. T.	
	9060	USSR	22 JUN 25	- 1	
	9276	USSR	22 JUN	5 SEP 76	
1976 057J	9385	USSR	NOF 22	13 SEP 76	
1976 057K COSMOS 834	9386 8914	USSR	22 JUN 25	- 1	
0588	8915	USSR		4	
1976 059B	8917	SO	26 JUN	30 JUN 76	
060B	8925	USSR		ڄ	
	9015	USSR		۽ع	
	8927	USSR	J	18 NOV 83	
	8929	USSR	ז שער	21 JUL 76	
1976 0520 1976 062E	8931	USSR	ז שער	26 SEP 82	
	8932	USSR	2 JUL 2	F \$	
	10048	USSR	2 JUL 2	<b>A</b>	
- 1	10050	USSR	2 JUL 2	` }	
- 1	10052	USSR	2 JUL 2	•	
	10054	USSR	2 JUL 2	8 AUG 78	
- 1	10056	USSR	2 JUL 2 JUL	ì	
	10058	USSR	2 JOL 2	G 3S	
	10077	USSR	- 1	A C	
	10079	USSR	2 JUL 2	CT	
1976 0630	10080	USSR	2 JUL 2	APR	
1976 063X	10002	USSR	2 JUL 2	27 JUL 77	
1976 0637	10098	USSR	2 JUL 2	- 1	
107/ C/JIE	10100	USSR	2 JUL 2 JUL	29 OCT 77	

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DBCAY	NOTES
1976 LAUNCHES (CONT	•					
		10102	USSR	1	١.	
l .		10104	USSR	2 JUL	35	
1976 063AG 1976 063AH		10105	USSR	2 101	17 AUG 77 18 APR 78	
- 1		10107	USSR	- 1	<b>d 3</b>	
		10108	USSR			
		10110	USSR	•	SEP	
1		10122	USSR		À :	
1976 003AP		10123	USSR	2 JUL 2 JUL	18 AUG 77	
		10125	USSR	1	[ ]	
		10126	USSA	1	1	i
1976 064A SOYUZ	21	8934	USSR	6 JUL 4 mi	24 AUG 76	<b>#</b>
		9006	SO			
		9010	<del>9</del> 7	-		
1976 066B		9012	US	8 JUL 9 1111	10 JUL 76	
	840	9019	USSR	14 JUL		
1976 058C		9021	USSR	14 JUL	17 JUL 76	
- 1	943	9043	USSR	- (	- 1	
0718	4 1 0	9045	USSR	21 JUL	23 JUL 76	
1	5	9048	USSR	·	Γ΄	8X+
		9064	USSR		994	
1976 0720		9065	USSR	22 JUL 22 JUL	2 AUG 76	
•		1906	USSR	•		
1976 6726		8900	USSR 11 CED	22 101	2 416 76	
ı		90.70	4550 4550	ł		
		9071	USSR	22 JUL	2 AUG 76	
1976 072L		9073	#855T	1	2 AUG 76	
		61.07 61.00	WS50	- 1	7	
		9075	USSR			
- 1		9076	USSR	1	<b>7</b>	
		9077	USSR	22 JUL	2 AUG 76	
1976 0721		9079	USSR	22 JUL 22 JUL	2 AUG 76	
1		9080	HSSN.	1		
1976 0728		9081	USSK	22 JUL 22 HII	2 AUG 76	
l _		9083	USSR	•	2 AUG 76	
		9084	USSR	22 JUL	2 AUG 76	
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1976 072AX 1976 072AX 1976 072BA 1976 072BB 1976 072BB 1976 072BC 1976 072BC 1976 072BC 1976 0728R 1976 07263 1976 0728I 1976 072BH 1976 072BJ 1976 072BK 1976 072AR 1976 072AS 1976 072AI 1976 072AU 1976 0728N 1976 0728P 1976 07288 1976 0728L 1976 0728M 1976 0728X 1976 0728V 1976 072AV 1976 072AN 1976 072AP 1976 072AJ 1976 072AK NATIONAL 1976 072AH 1976 072AL 1976 07246 1976 072AH 1976 LAUNCHES **DESIGNATION** INTER-(CONT.) DECAYED DOJECTS CATALGO NUMBER USSR USSR USSR USSR USSR USSR USSR USSR SOURCE LAUNCH 2 AUG 76 2 AUG NOTES

DECAYED GBJECTS	CATALDC	NAME NUMBER SOURCE LAUNCH DECAY	(*)	USSR	USSR 22 JUL	9139 USSR 22 JUL 2 AUG 76	115 CC 22 JUL	
		NAME						
	INTER-	DESIGNATION	1976 LAUNCHES (CONT.)	1976 07200	1976 07265	1976 072CF	1076 072CC	00710

NOTES

9137 U	USSR USSR	- 1	2 AUG	- 1
	USSR	22 JUL	2 AUG	76
	USSR		2 AUG	92
9142 9143 U	USSR	22 JUL 22 JUL	2 AUG	2
9144	USSR	22 JUL 22 JUL	2 AUG	22
	USSR	- 1	2 AUG	*
	USSR		2 AUG	92
9149	USSR		2 AUG	
	USSA	ı	ı	7
	USSR		2 AUG	2;
9152		22	Aug ~	2
	3550	- 1	2 400	٦.
	USSR		2 AUG	16
7	USSR	22 JUL	1	1
	USSR	22 JUL.	2 AUG	92
	USSR	22 JUL	T	ł
	USSR	22 JUL 23 III	2 AUG	7,0
9141	IISSR	22 JUL	7	_
	8330	•	2004	- 1
	USSR		2 AUG	92
	USSR	1	2 406	7
	USSR	22 JUL 33 JUL	2 AUG	22
9966	2001	i	<b>AUG</b>	2
	4550 11558	22 100	2 AUG	٦.
	USSR		2 AUG	92 :
	USSR	ł	2 406	7
9171	USSR	22 JUL 22 JUL	2 AUG	76
	USSR	ı	2 AUG	92
	USSR	- 1	2 446	1
	USSR	22 JUL	_	92 5
	USSR	ŀ	Ī	1
	USSR	22 JUL 33 JUL	2 AUG	
	USSR	44 400	21.4	7
	USSK	22 JUL	-	٦,
1810	USSR	•	_	3 76
	USSR	22 JUL	Ī	7
	USSR	•	•	3 76
9184	USSR	ſ	T	Π,
9185	USSR	,	2 AUG	92
0126	355			ļ

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY
1976 LAUNCHES (CONT.					
		9187	USSR		AUG
1		9189	USSR	1	1
		9191	USSR		
1976 072EM		9193	USSR	22 JUL	≽ີ ຄ
1976 072EN		9194	USSR USSR		2 AUG 76
1976 072ER		9197	USSR	- 1	2 AUG 76
1976 07263		9196	USSR	22 JUL	- i
1976 07250		9200	USSR		2 406 76
		9201	USSR		AUG
		9203	USSR	22 JUL	2 AUG 76
1976 072EZ		9205	UŠSR		2 AUG 76
1976 072FA 1976 072FB		9207	USSR	22 JUL	2 AUG 7
7 7		9209	USSR		<b>≱</b> 06
		9211	USSR	- 1	Aug O
		9213 9212	USSR	22 JUL 22 JUL	2 AUG 76
		9218	USSR		A Suc
_ 1		9220 9220	USSR	22 JUL	2
ĺ		9222	USSR		5 AUG 76
		9224	USSR	22 JUL	1
		9225 9226	USSR		5 AUG 76
l		9228	USSR	22 JUL	- 1
1976 072FW 1976 072FX		9229 9230	US5R USSR	- 1	<u>ک</u> و
- 1		9231	USSR		\$
1976 07264		7232	USSA NOCO	22 JUL	2 AUG 70
		9234	USSR	_	
		9236	USSR		5 AUG 76
		9237	055X	700 22	3 AUG 70

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DESIGNATION	NAME	NUMBER	SDURCE	LAUNCH	DECAY	NOTES
1976 LAUNCHES (CONT.)	•					
1		9240	USSR	•	5 AUG 76	
1976-0726J		924	USSR	22 JUL	ľ	
		9243	USSR	ı	9A4	
		9244	USSR		5 AUG 76	
1976 0726N 1976 0726P		9246	USSR	22 JUL	5 AUG 76	
- 1		9247	USSR	- 1	<b>↓</b>	
		9248	USSR	22 JUL	5 AUG 76	
- 1		9260	4669	T '	Γ ]	
		9250	0.53K	Ţ	- 1	
1976 0726V		9252	USSR		AUG	
- 1		9253	USSR	22 JUL	4	
		9254	USSR		5 AUG 76	
1976 072CY		9255	USSR			
_		9256	USSR	22 JUL 33 IIII	5 AUG 76	
1		9250	9551	•	١.	
		9626	0.55K			
1976 C/CHC		9260	USSR		_	
		9261	USSR	22 JUL	t	
_		9262	USSR		5 AUG 76	
		9263	4440	22 111	1	
		7204	A225	- 1	- 1	
1976 072HK		9266	USSR			
- 1		9331	USSR	•	<b>9</b>	
		9332	USSR	22 JUL	13 AUG 76	
		9333	9551	1	AUG	
		7554	033N		3	
1976 G72HR		9336	USSR		_	
		9337	USSR	1		
		9338	USSR	22 JUL 22 JUL	13 AUG 76	
- 1		0360	85511		AUG	
		0241	833T	- 1	9	
1916 UTCHN		9342	USSR		AUG	
- 1		9343	USSR	22 JUL	7 904	
		9344	USSR	22 JUL	AUG	
1976 67234		9345	**************************************	700 77	Γ	
		9346	USSK		2004	
		9348	USSR		AUG 7	
1910 01230		9349	USSR		9∩¥	
l _		9350	USSR	22 JUL	13 AUG 76	
- 1		9351	USSR		12 415 76	
		0252	¥/		9	

	25 AUG 76	12 AUG	USSR	9280	COSMOS 848	082A	1976
<b>Þ</b>	AUG	9 AUG	USSR	9278	THE STREET STATES	0810	1976
	*	- 1	USSR	9274		3180 94	1976
	AUG		USSR	9273		8180	1976
	ŧ	T	US5R	9272	LUNA 24	001 A	7
	AUG	A AUG	USSR	9377			1976
	\$	<b>♦ ★UG</b>	#558	9376		1	
		A AUG		9216		76 0790	1976
	17 AUG 70	4 AUG	CUUX	4126	COSMUS 847	ı	1976
	d	- 1		10753		- 1	3
	FEB		USSR	9056			1976
	4	- 1	USSR	9055	INTERCOSMOS 16	- 1	1976
	JUN	27 JUL	USSR	9789			1976
		1	##S\$R	9718		1	1074
	בור ה	27 אווו	USSR	4996		76 075E	7461 1476
	14 UCI 78		JUUK	9267		i	1976
	4		055K	9850		- 1	1976
	FEB	27 JUL	USSR	9054			1976
	1		USSR	9053	COSMOS 845	76 075A	1976
	SEP		USSR	9052			1976
	500	- 1	USSR	9051			7
	007		USSR	9050			1976
	17 AUG 70	72 JUL	COUR	9380		76 U/2KH	14/0
		- 1	1655X	7379		- 1	
	AUG		CSSR	9378			1976
	ŧ		USSR	9373		- 1	7
		22 JUL	USSR	9372			1976
	ŧ	1		9371			75
	AUG		USSR	9370			1976
	E 2	1	USSR.	9369		1	
	200 200 200		C S S R	8956			1976
		1	#35B	9367		1	Ŧ :
	13 AUG 76	22 אווו	ASSIII Veed	9986		76 072 JX	1976
	AUG	ļ	USOR	704		_	0161
	\$	- 1	0338	9363		- 1	
	<b>A</b> UG	22 JUL	USSR	9362			1976
	- 92 AUG 76	1	W SSR	9361			7
	AUG		USSR	9360			1976
	13 AUG 70	22 JUL	COUR	9359	Marketin de la company de la c	10 072JP	1976
	3	- 1	USSK	9357		- 1	
	AUG	22 JUL	USSR	9356			1976
	- 13 AUG 76		USSR	9355		76 67235	7
			USSR	9354			197
					(CUNT.)	76 LAUNCHES	1976
NOTES	DECAY	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION	ES
						NAT TOWAL	

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DE SIGNATION	NAME	E NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1976 LAUNCHES	S (CONT.)					
		9328	USSR	12 AUG	17 AUG 76	
1976 0820 1976 082E		9375	USSR			
	COSMCS 849	9382	HSSN	•		
_		9383	USSR	18 AUG	2 NUV //	
1976 083C	COSMUS 850	9387	USSR		MAY	
- 1		9388	HSSN:			
	COSMOS 852	9391	USSR	28 AUG	10 SEP 76	
1976 0868		9393	USSR		AUG	
		9412	USSR		435	ı
		9413	USSR		11 SEP 76	
		9414	8330	20 4 05	25 NOV 78	ł
	MA0 6	9594	ספר	- 1		ı
1976 0878	COSMOS 853	9398	USSR		DEC	
	}	9399	USSR	1 SEP	3	ł
		0046	USSR	1 SEP	20 MAY 77	ļ
- 1		60403	311	1 559	1	l
	TIP 3	9403	311	1 860	3	I
1976 039C		6046	Sn	1 SEP	1 MAR 78	
- 1		9410	30::	2 CEL	OU.	[
	COSMOS 854	9405	USSK	1 SEP	. d	ı
1976 0900		9422	USSR	3 SEP		
		9423	155R	11 050	20 SEP BO	1
		\$1 \$6	50 311	11 550	1	1
1976 0928		9417	USSR	11 SEP	14 SEP 76	
- 1		9418	9330	1 250	Ē	1
		0646 1440	033N	ı	**	1
1976 093A	SOYUZ 22	9421	USSR		23 SEP 76	₩.
		9424	8551	15 SEP	1	
		7570	377	•		1
1976 C94B		9427	Sn		17 SEP 76	
- 1	COSMOS 855	9433	135R	23 CED	2 DCT 76	ł
		\$ 440 1044 1044 1044	0.55H	- 1	13	1
1976 0956 1976 0950		9446	USSR		8 OCT 76	
- 1		9435	833f)	23 66	30 SED 76	1
		9436	USSK	22 SEP		1
1		9447	USSR			
1976 0960		8446	USSR	- 1	16 901 76	i
1976 097A	COSMUS 857	9439	USSR		7 OCT 76	
			C			

CAUNICHES   CONT - )	ZATHOZAC		C*T*E06			
LAUNCHES (CONT.)  1970 1970 1970 1971 1971 1972 1974 1975 1977 1977 1977 1977 1977 1977 1977	DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DĘCAY
97C 97C 9449 9559 9559 9570 9570 9570 9570 9570 957	1976 LAUNCHE	(CONT.			:	
0976         9770 <th< td=""><td>- 1</td><td></td><td>9449</td><td>USSR</td><td>•</td><td>- 1</td></th<>	- 1		9449	USSR	•	- 1
1997   9971   9558   24 567   29 19 19 19 19 19 19 19 19 19 19 19 19 19	1		9451	USSR	SE	
0990 9970 9970 9970 9970 9970 9970 9970	1	85	9471	USSR	- 1	
0996 0997 9973 USSR 10 OCT 21 0998 0998 9973 USSR 10 OCT 21 0998 0998 9979 9779 USSR 10 OCT 21 0998 0998 9779 USSR 10 OCT 25 0998 1998 9779 USSR 10 OCT 25 0008 1999 9779 USSR 27 0010 9779 1999 USSR 27 0010 9779 1999 USSR 27 0010 9779 1999 USSR 27 0010 9779 USSR 27 0010 USSR 27 0010 9779 USSR 27 0010	- 4		9472			1
OFFI   OFFI			9473	USSR		
1008   50742 23   5740   574	` 1		9492	USSR	- 1	•
1008   9480   9587   14 OCT   16   16   17   17   18   18   18   18   18   18	- 1	50102 23	9477	USSR	- 1	
NOTE	1		9480	USSR	1	L _
101E   9542   USSR   17 OCT   12 OCT			9493	S		NON T
1036			9498	50	^ 🕈	- 1
103C   9537   USSR   17 OCT   14	١.		9531	W558	4 1	ł .
1038   9539   9558   17 OCT   12 OCT			9537	USSR		
100   100	- 1		9538	USSR	- 1	- 1
1046			9539	USSR		
100			9631	USSR	1	- 1
100A   CDSMDS 863   9499   USSR 22 0CT 100B   100			9632	055R		- 1
100A   COSMOS 863   9499   USSR 25 OCT 29     100B   100C   9501   USSR 25 OCT 29     100B   100C   9502   USSR 25 OCT 29     100B   100B   9502   USSR 25 OCT 11     100B   100B   9502   USSR 25 OCT 11     100B   100B   9502   USSR 25 OCT 11     100B   100B   9502   USSR 25 OCT 11     100B   100B   9502   USSR 25 OCT 12     100B   100B   9502   USSR 25 OCT 29     100B   100B   9502   USSR 25 OCT 29     100B   100B   9502   USSR 25 OCT 29     100B   100B   9502   USSR 25 OCT 29     100B   100B   9502   USSR 25 OCT 29     100B   100B   9502   USSR 25 OCT 29     100B   100B   9502   USSR 25 OCT 29     100B   100B   9502   USSR 25 OCT 29     100B   100B   9502   USSR 25 OCT 29     100B   100B   9502   USSR 25 OCT 29     100B   100B   9502   USSR 25 OCT 29     100B   100B   9502   USSR 25 OCT 29     100B   100B   9502   USSR 25 OCT 29     100B   100B   100B   100B   100B     100B   100B   100B   100B   100B     100B   100B   100B   100B   100B     100B   100B   100B   100B   100B     100B   100B   100B   100B   100B     100B   100B   100B   100B   100B     100B   100B   100B   100B   100B     100B   100B   100B   100B   100B     100B   100B   100B   100B   100B     100B   100B   100B   100B   100B     100B   100B   100B   100B   100B     100B   100B   100B   100B   100B     100B   100B   100B   100B   100B     100B   100B   100B   100B   100B     100B   100B   100B   100B   100B     100B   100B   100B   100B   100B     100B   100B   100B   100B   100B   100B     100B   100B   100B   100B   100B   100B     100B   100B   100B   100B   100B   100B     100B   100B   100B   100B   100B   100B     100B   100B   100B   100B   100B   100B   100B     100B   100B   100B   100B   100B   100B   100B     100B	- 1		7497	WSSR	- 1	i
1000 9501 USSR 25 OCT 29 1000 9502 USSR 25 OCT 29 1000 9502 USSR 25 OCT 29 1000 9521 USSR 25 OCT 11 1000 10522 USSR 25 OCT 11 1000 10522 USSR 25 OCT 11 1000 10523 USSR 25 OCT 11 1000 10523 USSR 25 OCT 11 1000 10524 USSR 25 OCT 11 1000 10525 USSR 25 OCT 29 1070 USSR 25 OCT 29 1070 USSR 25 OCT 29 1070 USSR 26 OCT 29 1070 USSR 26 OCT 29 1071 USSR 1 NOV 13 1070 USSR 1 NOV 15 1070 USSR 1 NOV 15 1070 USSR 1 NOV 22 1070 USSR 1 NOV 22 1070 USSR 1 NOV 22 1070 USSR 1 NOV 22 1070 USSR 1 NOV 22 1070 USSR 1 NOV 22 1070 USSR 1 NOV 23	1	86	9499	USSR	1	S NOV
106E   9521   USSR   25 OCT   11 OCT   106G   9524   USSR   25 OCT   11 OCT   106G   9524   USSR   25 OCT   11 OCT   106G   9524   USSR   25 OCT   17 OCT   106G   9524   USSR   25 OCT   10 OCT   100K   9528   USSR   25 OCT   10 OCT   1			9501	USSR		
1006			9521	USSR		
106J 9528 USSR 25 0CT 10 106K 9528 USSR 25 0CT 10 106K 9529 USSR 25 0CT 10 107B 9529 USSR 25 0CT 27 107B 9529 USSR 26 0CT 29 107C 9540 USSR 26 0CT 29 107C 9540 USSR 26 0CT 26 107C 9540 USSR 1 NOV 13 109A CUSMUS 865 9517 USSR 1 NOV 13 109C 9520 USSR 1 NOV 27 109B 9520 USSR 1 NOV 27 109B 9520 USSR 1 NOV 27 109B 9525 USSR 1 NOV 27 109B 9526 USSR 1 NOV 27 109B 9526 USSR 1 NOV 27 109B 9526 USSR 1 NOV 27 109B 9526 USSR 1 NOV 27 110A CUSMUS 866 9532 USSR 1 NOV 27 110A CUSMUS 866 9532 USSR 1 NOV 27 110B 9532 USSR 1 NOV 27 110B 9532 USSR 1 NOV 27 110B 9532 USSR 1 NOV 27 110B 9532 USSR 1 NOV 27 110B 9532 USSR 1 NOV 27 110B 9532 USSR 1 NOV 27 110B 9532 USSR 1 NOV 27 110B 9532 USSR 1 NOV 27 110B 9532 USSR 1 NOV 37 110B 9532 USSR 1 NOV 37 110B 9532 USSR 1 NOV 37 110B 9533	- 1		9522 9524	USSR	- 1	7 NOV
106J     9528     USSR     25 DCT     10       106K     9529     USSR     25 DCT     7       107B     9529     USSR     26 DCT     27       107C     9504     USSR     26 DCT     27       107E     9540     USSR     26 DCT     26       107E     9515     USSR     26 DCT     26       109A     CDSMOS 865     9515     USSR     1 NOV     13       109C     9517     USSR     1 NOV     14       109B     9517     USSR     1 NOV     1       109B     9519     USSR     1 NOV     1       109C     9520     USSR     1 NOV     1       109B     9525     USSR     1 NOV     10       109B     9525     USSR     1 NOV     10       109B     9526     USSR     1 NOV     10       109B     9526     USSR     1 NOV     10       109B     9526     USSR     1 NOV     10       109B     9527     USSR     1 NOV     10       109B     9526     USSR     1 NOV     10       109B     9526     USSR     1 NOV     20       109B     9526	. L		7527			9 XOX
1078 9504 USSR 26 OCT 29 1070 9505 USSR 26 OCT 29 1070 9540 USSR 26 OCT 29 1070 9540 USSR 26 OCT 27 1070 9510 USSR 26 OCT 26 1071 1072 1073 USSR 1 NOV 14 1071 1072 1073 USSR 1 NOV 17 1071 1072 1073 USSR 1 NOV 17 1071 1072 1073 USSR 1 NOV 17 1071 1072 1073 USSR 1 NOV 22 1071 1072 USSR 1 NOV 22 1071 1072 USSR 1 NOV 22 1071 1072 USSR 1 NOV 22 1071 1072 USSR 1 NOV 22 1071 1072 USSR 1 NOV 22 1071 1072 USSR 1 NOV 22 1071 1072 USSR 1 NOV 22 1071 1072 USSR 1 NOV 22 1071 1072 USSR 1 NOV 23 1100 COSMUS 866 9532 USSR 1 NOV 23 1100 COSMUS 866 9532 USSR 1 NOV 23 1100 COSMUS 866 9532 USSR 1 NOV 23 1100 COSMUS 866 9532 USSR 1 NOV 10 1100 USSR 1 NOV 10			9528	USSR		l.
107C 9505 USSR 26 OCT 27 107D 9540 USSR 26 OCT 26 107E 9540 USSR 26 OCT 26 107E 9541 USSR 26 OCT 26 109B 9515 USSR 1 NOV 13 109B 9517 USSR 1 NOV 14 109B 9520 USSR 1 NOV 27 109B 9525 USSR 1 NOV 27 109B 9526 USSR 1 NOV 27 109C 9532 USSR 1 NOV 27 110A COSMUS 866 9532 USSR 11 NOV 23 110A COSMUS 866 9532 USSR 11 NOV 23 110B 9533 USSR 11 NOV 23 110B 9533 USSR 11 NOV 23 110B 9533 USSR 11 NOV 23			9504	USSR		
107D 9540 USSR 26 UCT 26 107E 9541 USSR 26 UCT 26 107E 9511 USSR 1 NOV 13 109B 9516 USSR 1 NOV 14 109C 9517 USSR 1 NOV 5 109B 9520 USSR 1 NOV 22 109B 9525 USSR 1 NOV 22 109F 9526 USSR 1 NOV 16 109H 9532 USSR 1 NOV 16 110B 9532 USSR 11 NOV 23 110B 9533 USSR 11 NOV 23 110B 9533 USSR 11 NOV 23 110B 9533 USSR 11 NOV 23 110B 9533 USSR 11 NOV 23	- 1		9505	USSR	- 1	1
109A CUSMOS 865 9515 USSR 1 NOV 13 109B USSR 1 NOV 5 109B 9517 USSR 1 NOV 5 109B 9520 USSR 1 NOV 5 109F 9520 USSR 1 NOV 22 109F 9525 USSR 1 NOV 10 109H 9526 USSR 1 NOV 10 109H 9526 USSR 1 NOV 22 109H 9526 USSR 1 NOV 22 110A COSMUS 866 9532 USSR 11 NOV 23 110A COSMUS 866 9532 USSR 11 NOV 23 110B 9533 USSR 11 NOV 23			9540	USSR	•	L.
1096 9516 USSR 1 NOV 5 109C 9517 USSR 1 NOV 5 109B 9519 USSR 1 NOV 5 109F 9520 USSR 1 NOV 10 109F 9525 USSR 1 NOV 10 109H 9532 USSR 1 NOV 10 110A COSMUS 866 9532 USSR 11 NOV 23 1110A COSMUS 866 9532 USSR 11 NOV 23 1110B 9533 USSR 11 NOV 14		O SMOS 8	9515	USSR		
1096 9519 USSR 1 NOV 22 1096 9520 USSR 1 NOV 22 1097 9523 USSR 1 NOV 10 1098 9525 USSR 1 NOV 10 1098 9532 USSR 1 NOV 23 1100 COSMUS 866 9532 USSR 11 NOV 23 1100 9533 USSR 11 NOV 23 1100 9533 USSR 11 NOV 23	- 1		9516 9517	9258	I NOV	
109E     9520     USSR     1 NOV     22       109F     9523     USSR     1 NOV     10       109G     9525     USSR     1 NOV     10       109H     9526     USSR     1 NOV     23       110A     COSMUS 866     9532     USSR     11 NOV     23       110B     9533     USSR     11 NOV     14	i		9519	USSR	YON T	F
1096 9525 USSR 1 NOV 10 1098 9526 USSR 1 NOV 5 1098 9526 USSR 1 NOV 5 1104 COSMUS 866 9533 USSR 11 NOV 23 1108 9533 USSR 11 NOV 14			9520	USSR	1 NOV	
1109H 9526 USSR 11 NBV 23 1100A COSMUS 866 9532 USSR 11 NDV 23 1100B 9533 USSR 11 NDV 14			9525	USSR	AON I	
110A CUSMUS 866 9532 USSR 11 NOV 14			9526	USSR	+	- 1
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DESIGNATION	NAME	NUMBER	SUURCE	LAGINCH		
1976 LAUNCHES	ES (CONT.)					
1976 110E		9536	USSR	11 NOV		
- 1		1556	955B		22 1010	
		9553	USSK	NON TO	24	
1	COSMOS 867	7666	NECO		1 FEB 77	
		9554	0.55K	i	16 DEC 76	
1976 1110		9556	USSR			
- 1		9966	USSR			
		9582	USSR	_	1 JAN 78	
•		9583		NON CC	L.	
1976 111H		9584	2002	23 NOV		
1		9585	ASSI1	١.	5 MAR 77	
		9300	9550			
		9559	USSR		5 JAN 77	
1976 1120		9560	USSR		X * 9	
ł	CUSM35 868	9561	USSR			
	- 1	9562	USSR			
	CDSM0S 869	9564	USSR	29 NOV	17 DEC 76	
8547-926T		9565	2007	1	20 DEC 80	
	CDSMDS 870	9573	USSE	- 1		
1976 1158		9577	USSR	2 DEC		
1976 1150		1666	USSR	2 0EC	APR	
		9992	USSR	2 060	11 JUN 78	
1976-115F		9993	1990	7	A MAD 77	
1976 1168		9575	USSK	2 DEC	I	
1976 116C		9580	USSR	2 DEC	13 FEB 77	
		9591	USSR	2 DEC-	1	
l	MAD 7	9587	PRC	7 DEC	2 JAN 77	
•		9656		7 050	ł	
		9597	PRC	9 050		
1	COSMOS 879	9600	USSR		_	
19/6 1196		5096	USSR	- 1	4	
1 _		9603	USSR		15 DEC 76	
	CDSMBS 880	9601	3333	0 050	l _	
1976 1200		6096	ASSO.	- 1	3	
1		11179	USSR		MAR	
		08111	USSR	930 6	169	
1976 1206		11181	USSR		20 JUL 79	
		11182	B\$\$N		14 400 70	
		11183	USSK	- 1		
- 1		11125	855I)	_	_	
		11185	NSSU	- 1	8 AON	
1976 120H		11187	USSR	9 DEC	2 APR 79	

	16 NOV 77	17 DEC	USSR	9922		1976 124N
			. , , , ,			
	1		US5R	9920		1976 12411
	200		USSR	9919		
	5 NOV 77	17 DEC	USSR	9918		1976 1248
	<b>1</b>		055R	93.6		ı
	VOV		USSR	9915		
	!		USSR	7914		-
	11 NOV 77		85541	9901		
		17 DEC	USSR	9626		1976 124C
<b>#</b>	\$ 560		West of the second seco	9625	-	1248
	14 OCT 79		USSR	9615	)S 885	
	1 JAN //	17 050	HASA	9646		1976 1236
	966		USSR	9640		310 1230 0021 0161
	NAC		USSR	9624		
			955R	9629	1	1238
		17 DEC	USSR	9614	)S 884	
SI VT	26 DEC 76		USSR	9611		1976 121E
			955R	9609		
9A AU			85511	8088	200 002	1976 1210 COSMOS
	DEC		USSR	9606		
	3 JUN 79	1	US5R	11225		ł
	\$	9 956	1555	11324		1976-12088
151 q			USSR	11219		
	5 550 00	9 9 5 6	#558 2005	11216		ł
	- 1	•	1358 1358	11215		
	DEC	9 DEC	USSR	11209		1976 120AL
	***		NSSR	11208		
	26 FEB 79	9 DEC	USSR	11206		<b>.</b> .
	בוב	9 DEC	USSR	11202		1976 120AU
	4	- 1	USSR	11201		1.
	10 JUL 79	9 DEC	USSR	11200		
	HAR	9 DEC	USSR	11198		1976 1202
	*	# :	U55R			
	7 APR 79	9 DEC	USSR	11196		
			USSR	11194		1976 120V
	4	#	USSR	11192		
	16 JUN 79	3 DEC	USSR	11191		
	FEB	9 DEC	USSR	11189		1976 1200
					NT.)	1976 LAUNCHES (CONT.
NOTES	DE <sub>I</sub> CAY	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION

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NATIONAL		CATALOG				20100
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAT	NUTES
1976 LAUNCHES	ES (CONT.)					
1976 1249		9924	USSR		14 DEC 77	
1926		9925	3337	17 050	1 DEC 77	
		9926	USSK	17 050	39	
1976 1241		10391	USSR		NYT	
- 1		9627	Sh	19 050	1	
-		9628	S 0	19 DEC	22 EEB 22	
- 1		9629	211	ŀ	FEB	
		9050	9550	27 DEC	9	
1976 1268		9644	USSR		•	
- 1		9645	HSSN		<b>*</b>	
		9719	SSR	27 DEC	11 JUL 78	
- 1		9720	90011	l	JUL	,
_		9817	033H	22 050	MAR	
		9952	USSR		0CT	
		0000	USSR	27 DEC	\$	
1976 127B		9636	USSR		16 MAR 77	
		9661	•	J,		
		9642	USSR	28 DEC	23 FEB 11	
1977 LAUNCHES	ES					1
A100 7761	COSMUS 888	9658	USSR	6 JAN	19 JAN 77	
-8100 ZZ6T		<b>5646</b>	doori	NAL. 6	7	
٠.	:	9660	ASSU		NA T	1
1977 0015		9733	USSR	O JAN	21 JAN 77	
- 1		9734	USSR		4	1
_	COSMOS 889	9735	USSK	20 JAN		
		9787	Sn	•	FEB	
1911 0035	COCKIDG BOIL	9801	USSR	t		
_	***	9802	USSR	2 FEB	18 DEC 79 6 FEB 77	
- 1	1	9086 9086	USSR	7 FEB		##
	SUTU2 24	2000	ASSI	7 558	2 568	
1977 6088		9806	USSR	_	FEB	
	CUSMUS 892	9812	USSR		72	
		9813	USSR	9 FEB	٠'	
- 1		9166	8551	9 FEB		
		9649		- 1	- 1	
1977 009F		6486	USSR	9 768	23 FEB 77	
- 1		9851	33311	I		
		9830	9350	. 4	4	•
1977 0136-		9832	USSR	11 FEB	27 FEB 77	
		111		611	47 1.20 7	

INTER-		DECATED DBJECTS			
DE SIGNATION	NAME	CATALBS NUMBER	SOURCE	LAUNCH	DECAY
1977 LAUNCHES	S (CONT.)				
0.1		9834	USSR	15 FEB	VOV
1977 0116 1977 0128		9842	JAPAN	19 FEB	21 MAR 79
1977 0120	COSMOS 896	9844	USSR	19 FEB	16 MAR 77
1		9858	USSR	1	HAR.
		9865	USSR	3 MAR	
		9870	USSR	3 MAR	MAR
1977 0166		9874	USSR	3 HAR	23 MAR 77
- 1	DC MILE	0340 6486	HSSR	- 1	- 1
1977 017B	CUMUS 891	9861	USSR	10 138	15 TAR 33
		9876	USSR		I A
1977 017E		9878	USSR	10 MAR	26 MAR 77
1977 0176		9879	USSR	10 MAR	20 MAY 77 27 MAR 77
1977 0186		9866	Sn	10 MAR	17 DEC 77
- 1		9867		φ	3
V610 4461		9863	95	13 347	26 MAY 77
	encune non	10012	US	13 MAR	HAY
	CUSHUS 070	9872	CSSR	17 MAR	HA R
1977 020D		9887	USSR	- 1	A PR
1977 0216		9882	USSR	24 HAR	₽ PR
1977 022A	C05M05 099	9884	USSR	24 MAR	25 DEC 80
- 1	- 1	9900	USSR		3
1977 023A	COSMOS 900	9898	USSR	29 MAR	11 OCT 79
	COSMOS 901	9905	USSR	5 APR	NOF
1977 026A	COSMOS 902	8066	USSR	7 APR	APR
1977 0268 1977 026C		9910	USSR	7 APR	10 APR 77
- 1		9920	USSR	ľ	*
		9929	USSR	7 APR	23 APR 77
		9913	USSR	11 APR	
1977 0288	CUSMUS 704	9935	USSR		
1977 0296		9932	US X55K	20 APR	20 APR 77
1711 0070		2024			

DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1977 LAUNCHES	S (CONT.)					
1	COSMOS 905	9937	USSR	26 APR	26 HAY 77	
1977 G30C		0466	USSR	ŀ	¥¥	
- 1		10023	USSR	- 1	MAX	
1977 031A	COSMOS 906	9938	USSR	27 APR	23 MAR 80	
ŀ		999	USSR		A Y	
	COSMOS 907	9944	1335 1335 1335 1335 1335 1335 1335 1335	5 MAY	13 MAY 77	
1977 0338		9945	USSB	2 HA1	- 1	
		1466	USSR			
. !		10004	USSR		ł	
		10005	USSR	5 MAY F MAX	20 MAY 11	
1977 0360		10003	US	l .	14 MAY 77	
	806 SUNSUO	10007	USSR	17 MAY	·	
_		10008	USSR		21 MAY 77	
1977 0350		10027	assii	17 MAY	77 NUL E	
	COCMOS 010	10014	8330		- 1	
		10015	USSR			
1977 0376	COCMOC 012	10021	ASSE 11888	26 MAY	77 NUL 8	
1977 0408	- 1	19021	955N	i	- 1	
		10026	USSR			
ı		10035	USSA	26 448	18 HIN 77	
	C to SOMSON	10038	A5.50	t	ı	
1977 0428	cours of s	10029	USSR			8 X
- 1		10237	H35B	ł	404	
		10238	USSR	30 MAY	18 FEB /8	
1977 0425		10330	USSR			
- 1		10331	USSR	•	- 1	
		10332	USSR	30 MAY	18 APR 78	
1977 0423		10334	USSR			
- 1		10335	USSR	30 HAY		
		10336	USSR		FEB	
1		10337	USSR			
		10349	USSR	30 MAY	15 APK 78	
1977 0424		10418	USSR		NOT	
- 1		10487	USSR	- 1	A A A	
		10488	USSR		APR 7	
		10494	USSR	X 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DAN OF	
		10495	USSK	30 MAY		
1077 0628		10497	USSR USSR		MAR	

NATIONAL DESIGNATION	NAME	CATAL BG NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1977 LAUNCHES (CO	(CONT.)					
1		10031	USSR	31 HAY	- 1	
٠.١		10032	USSR	31 MAY	18 JUN 77	
	IDS 915	10038	USSR	NOF 8	21 JUN 77	
1977 0450		10073	USSR	NOF 8	25 JUN 77	
1977 045E		10084	ASSN WSSN	A JUN	23 JUN 77	
0464	605M05 916	100+0	USSR	1	1	
046B		10041	USSR		5	
		10043	USSR	NOF 01	18 JUN 77	
		10088	USSR	NO JUN	27 JUN 77	
		10060	USSR	16 JUN	¥06	
		10063	S. O. S.	16 JUN	- 1	
048E		10075	Sn	16 JUN	11 JUL 77	
0498	T J	10069	USSR	NOF 21	5 FEB 80	
0508	603003 918	10068	USSR	17 JUN	N C	
8150 W160	CU3NO3 717	10071	USSR	NOF 81	21 APR 78	
0510		10806	USSR	ł	- 1	
0528	CUSITUS 720	10087	USSR		کر و د	
		10128	USSR	NOF 22	چ	
1977 054B		10093	USSR		1	
		10111	US	- 1	DEC	
		10116	USSR	- 1	1	
0598	COULCOURT SEC	10117	USSR			
0580		10119	USSR	NOF OF	ج و	
0608	6031103 764	10130	USSR	+ JUL +	NAC	
0600		10132	USSR	<b>→</b> JUL	3 DEC 77	
1977 0638 CUSM	COSMOS 721	1013)	USSR	10. 21 2 JOE	18 JUL 77	
		10162	USSR		4	

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NAT I DNAL		CATAL DC				
DE SI GNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1977 LAUNCHES (CONT.)	•					,
		10163	USSR	12 JUL	JUL	ı
1977 065C		10156	SO	14 JUL	⋛	
- 1		10176	St)	ı	4	•
		10182	Sn	14 JUL	1 JAN 81	
1977 065R 1977 0651		10189	SN	14 JUL	FEB	
.1		10101	30	1		
1977 065X		10193	US	14 JUL 14 III	17 APK 79 10 NOV 82	
1 .		10197	SN	14 JUL	3	
		10199	50		30 NOV 80	
1977 065A0		10200	60	14 JUL 14 HH	2 3	
l		10209	Sn	14 JUL	SEP	
1977 065AP		10213	30		13 APR 81	
_		10215	SU.	- 1	APR	
		10216	Sn	14 JUL	5 JUN 82	
1977 06588		10224	US	14 JUL	1	
- 1		10225	50		3	
		10228	NS NS	14 JUL 14 HH	11 MAR 81 20 au 82	
1977 065BP		10236	SN	14 JUL	AUG	
1977 06581		10245	Sn	14 JUL	4 NOV 77	
		10247	30	14 JUL	9 AUG 79	
_		10248	S	14 105	14 FEB 79	
1977 065GE 1977 065GE		10254	SO	14 JUL	1	
- 1		10256	Sn	- 100 AL	1.	
1977 06500		10263	US	14 JUL 14 JUL	1 MAY 81 22 JUN 80	
١.		10267	S	14 Jul.	21 JAN 82	
1977 065CV		10304	US	14 JUL	l	
- 1		10307	30	14 JUL	<b>*</b>	
		10308	US	14 JUL	16 JUN 79	
1977 0650R		10342	Sn	14 JUL	NAC	
		10343	SII	14 JUL	2 JUL 79	
1977 06501		10347	30	- 1	╡	
١.		10390	Sn	14 JUL	6 DEC 81	
1977 065EA 1977 065EF		10472	Sn	14 JUL	MAR	
		10473	- Sn	100 41	X :	
1977 O65FG		10474	90	14 JUL	87 NUC 21	

LAUNCHES (CONT.)   LAUNCHES (C	AND TOWN		CATA DC			
LAUNCHES (CONT.)   10.55EK   10.077   U.S.   11. JUL   10.0EC   10.05EK   10.077   U.S.   11. JUL   10.0EC   10.05EK   10.0623   U.S.   11. JUL   10.0EC   10.0623   U.S.   11. JUL   10.0EC   10.0623   U.S.   11. JUL   10.0EC   10.0623   U.S.   11. JUL   10.0EC   10.0623   U.S.   11. JUL   10.0EC   10.0623   U.S.   10.0EC   10.0EC   10.0EC   10.0EC   10.0EC   10.0EC   10.0EC   U.S.   10.0EC   10	DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY
77 085EK 10477 US 14 JUL 10 DEC 17 085EK 11 JUL 10 DEC 17 085EK 11 JUL 10 DEC 17 085EK 11 JUL 10 DEC 17 085EK 11 JUL 10 DEC 17 085EK 11 JUL 10	1977 LAUNCHES					
0-52-ER         1049-02         US         14 JUL         20 JUL           0-52-ER         1048-23         US         14 JUL         20 JUL           0-53-ER         1048-23         US         14 JUL         20 JUL           0-65-ER         1049-23         US         20 JUL         21 JUL         22 JUL         20 JUL         22 JUL         23 JUL         24 JUL         24 JUL         24 JUL         24 JUL         24 JUL         24 JUL         24 JUL         24 JUL         24 JUL         24 JUL         24 JUL         24 JUL         24 JUL	77		10477	US	•	DEC
1005E    10024	- 1		10483	Sn		AUG
OFFE         10031         US         14 UIL         8 OFF           OFFE         10031         US         14 UIL         8 OFF           OFFE         10040         10140         10140         2 FEB           OFFE         10140         10140         10140         2 FEB           OFFE         10140         10140         10140         10140           OFFE         10140         10141         10140 <td></td> <td></td> <td>10624</td> <td>SO</td> <td>` 1</td> <td>کے چ</td>			10624	SO	` 1	کے چ
COLUMB   C			16901	SII	- 1	SE E
100   101	0007	EBSM05 929	10146	NSSB.	T.	
October   Octo	0668		10147	USSR		JUL
Color   Colo	067A	OSMOS 9	10149	USSR		YAH
100   100			10151	USSR	- 1	Aug
10170   10270   10170   1058   20 JHL   3 ALIG   10170   101	069A	COSMOS 932	10154	USSR		ב
O770B   CO3MOS 933   10157   USSR 22 JUL   7 JUN   10710   USSR 22 JUL   26 JUL   7 JUN   10710   USSR 22 JUL   26 JUL   10710   USSR 22 JUL   26 JUL   10710   USSR 22 JUL   26 JUL   27 JUL	- 1		10176	USSR	- 1	<b>∆</b> 6
1916   1916   1958   23 JUL   26 JUL   1916   1927   1927   1927   1928   23 JUL   26 JUL   1927   1927   1928   23 JUL   25 JUL   26 JUL   1927   1928   23 JUL   25 JUL   25 JUL   27 JUL	0704	COSMOS 933	10157	USSR	- 1	- 1
The   The			10161	USSR	- 1	<u>`</u>
177E   10277   USSR   23 JUL   25 MAR   10277   USSR   23 JUL   25 MAR   10164   USSR   27 JUL   5 AUG   10174   USSR   27 JUL   5 AUG   10174   USSR   27 JUL   17 AUG   10174   USSR   27 JUL   17 AUG   10175   USSR   27 JUL   17 AUG   10175   USSR   27 JUL   17 AUG   10175   USSR   27 JUL   10174   USSR   27 JUL   10 AUG   10175   USSR   27 JUL   10 AUG   10173   USSR   27 JUL   10 AUG   10173   USSR   27 JUL   10 AUG   10173   USSR   27 JUL   10 AUG   10173   USSR   27 JUL   10 AUG   10173   USSR   27 JUL   10 AUG   10173   USSR   27 JUL   10 AUG   10173   USSR   27 JUL   20 AUG   27 JUL   20 AU			10276	U\$\$\$	1	4
0.723.0         COSMOS 935         10165         USSR         27 JUL         5 AUG           0.725.0         10174         USSR         27 JUL         17 AUG           0.725.0         10174         USSR         27 JUL         17 AUG           0.725.7         10175         USSR         27 JUL         10 AUG           0.725.7         101795         USSR         27 JUL         10 AUG           0.725.7         10169         USSR         27 JUL         11 AUG           0.725.7         10169         USSR         27 JUL         11 AUG           0.726.7         10173         USSR         29 JUL         11 AUG           0.727.7         10173         USSR         29 JUL         3 AUG           0.728.7         10275         USSR         29 JUL         3 AUG           0.729.7         10275         USSR         3 AUG         28 AUG           0.729.7         10275         USSR         3 AUG         25 AUG           0.729.7         10279         USSR         24 AUG         25 AUG           0.730.7         10283         USSR         24 AUG         25 AUG           0.730.7         10284         USSR         24 AUG			10277	USSR	1	MAR
17726   10176   10176   10378   27 Jul.   17 AUG   10175   10258   27 Jul.   17 AUG   10175   10258   27 Jul.   17 AUG   10175   10258   27 Jul.   10 AUG   10175   10258   27 Jul.   10 AUG   10173   10258   29 Jul.   11 AUG   10173   10258   29 Jul.   11 AUG   10173   10258   29 Jul.   11 AUG   10173   10258   29 Jul.   10275   10275   10275   10275   10275   10275   10275   10275   10275   10275   10277   10	- 1		10165	USSR		AUG
O72E			10174	USSR		SUV SUV
073A         CBSMBS 935         10160         USSR         29 JUL         3 AUG           074B         CBSMBS 936         10173         USSR         29 JUL         3 AUG           074B         CBSMBS 936         10173         USSR         3 AUG         28 AUG           074B         10274         USSR         3 AUG         28 AUG           074C         10275         USSR         3 AUG         8 GCT           074B         10217         USSR         3 AUG         8 GCT           077B         10218         USSR         12 AUG         25 AUG           077B         10279         USSR         24 AUG         25 AUG           07BC         10284         USSR         24 AUG         25 AUG           07BC         10284         USSR         24 AUG         25 AUG           07BC         10324         USSR         24 AUG         25 AUG           07BC         10325         USSR         24 AUG         25 AUG           07BC         10327         USSR         24 AUG         25 AUG           07BC         10327         USSR         24 AUG         7 SEP           07BC         10327         USSR         24 AU	072E		10175	USSR	- 1	AUG OG
074A         C05405 936         10172         USSR         3 AUG         28 AUG           074B         10275         USSR         3 AUG         28 AUG           074C         10275         USSR         3 AUG         5 SEP           074B         1021B         USSR         3 AUG         8 OCT           077A         C05MDS 937         1021B         USSR         24 AUG         25 NUG           077B         C05MDS 93B         10279         USSR         24 AUG         25 AUG           07BC         10284         USSR         24 AUG         25 AUG           07BC         10284         USSR         24 AUG         6 SEP           07BE         10284         USSR         24 AUG         11 SEP           07BE         10284         USSR         24 AUG         7 SEP           07BE         10285         USSR         24 AUG         7 SEP           07BE         10286         USSR         24 AUG         7 SEP           07BE         10287         USSR         24 AUG         7 SEP           07BE         10287         USSR         24 AUG         7 SEP           07BE         10287         USSR         24 AUG </td <td>073A 073B</td> <td>COSMOS 935</td> <td>10169</td> <td>USSR</td> <td>. 1</td> <td>2</td>	073A 073B	COSMOS 935	10169	USSR	. 1	2
10274   10275   10274   10275   10275   10275   10275   10275   10275   10275   10277   10217   10217   10217   10217   10217   1027		EBSM85 936	10172	USSR	· 1	2
O740			10274	USSR	- 1	#
C75B 1121B US 12 AUG 25 NOV 177B C05MOS 737 1021B USSR 24 AUG 13 BGT 1027B USSR 24 AUG 25 AUG 17 BGT 1027B USSR 24 AUG 25 AUG 17 BGT 1028A CDSMOS 93B 1028A USSR 24 AUG 6 SEP 1028A USSR 24 AUG 11 SEP 1028A USSR 24 AUG 11 SEP 1028A USSR 24 AUG 11 SEP 10324 USSR 24 AUG 11 SEP 10325 USSR 24 AUG 7 SEP 10325 USSR 24 AUG 7 SEP 10326 USSR 24 AUG 7 SEP 10327 USSR 24 AUG 7 SEP 10327 USSR 24 AUG 7 SEP 10327 USSR 24 AUG 18 SEP 10327 USSR 25 AUG 10 AUG	ı		10275	USSR	1	₹ CT
O77A   C05MOS 737   10279   USSR   24 AUG   25 AUG   O77C   10280   USSR   24 AUG   25 AUG   O77C   10280   USSR   24 AUG   25 AUG   O78A   CDSMOS 938   10281   USSR   24 AUG   6 SEP   O78B		TEAC I	10218	US S		VO
077C         078A         CDSMOS 938         10280         USSR         24 AUG         6 SEP           078B         10281         USSR         24 AUG         30 AUG           078B         10284         USSR         24 AUG         11 SEP           078B         10285         USSR         24 AUG         21 SEP           078E         10324         USSR         24 AUG         7 SEP           078F         10325         USSR         24 AUG         6 SEP           080C         10296         USSR         25 AUG         10 AUN           080C         10297         USSR         25 AUG         10 AUN           080C         10297         USSR         25 AUG         10 AUN		COSMOS 937	10279	USSR	. 1	AUG
0788     10283     USSR     24 AUG     30 AUG       078C     10284     USSR     24 AUG     11 SEP       078B     10285     USSR     24 AUG     21 SEP       078E     10324     USSR     24 AUG     7 SEP       078F     10325     USSR     24 AUG     7 SEP       080C     10296     US     25 AUG     10 AUN       080C     10297     US     25 AUG     10 AUN       080C     10297     US     25 AUG     10 AUN       080C     10 AUN     10297     US     25 AUG     10 AUN		- 1	10281	USSR	1	SEP
078C 10284 USSR 24 AUG 21 SEP 10285 USSR 24 AUG 7 SEP 10325 USSR 24 AUG 7 SEP 10325 USSR 24 AUG 6 SEP 10325 USSR 24 AUG 10 AUG 10296 US 25 AUG 10 US 10297 US 25 AUG 10 UN 10297	1		10263	USSR	-1	\$
078E 10324 USSR 24 AUG 7 SEP 078F 10325 USSR 24 AUG 6 SEP 080C 10296 US 25 AUG 10 NOV 080D 10297 US 25 AUG 18 JAN			10284	USSR	1	200
070F 075K 27 AUG 10 NOT 10296 US 25 AUG 10 NOT 10297 US 25 AUG 10 JAN 7 NO	- 1		10324	USSR		SEP
0000 US 25 AUG 10 JAN	- 1		10296	SN	-	NOV
	1		10297	50	1	

DESIGNATION 1977 LAUNCHES (CONT 1977 0818 1977 0816 1977 0828		0 )   1				
LAUNCHES 0818 0816 0826 0826	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
	NT.)					
		10300	USSR	27 AUG		
		10301	135B	Ī		
١		10317	USSK	20 AUG	SEP	
_		10318	USSR	Γ -	l	
1977 0834 CUSM	CD SMDS 948	10319	USSR 1155B	1	7 SEP 77	
٠.		10264	A550	2 SEP		
0830		10357	USSR		SEP	
085A	CDSMDS 949	10326	USSR	1		
		10327	USSR	6 SEP	11 SEP 77	
1977 086A COSMOS	03 950	10351	USSR	13 SEP	SEP	
8980		10253	0330	ŧ	9	
_		10354	USSR		SEP	
1		10399	HSSE.	1		
		10350	USSE BESE	16 SEP	11 UC1 //	
0898		10360	USSR	16 SEP	SEP	
- 1		10380	USSR	- 1	93	
0680		10381	USSR		SEP	
₹060	COSHOS 954	10361		435.85	1	
1977 091C		10364	USSK	20 SEP 20 SEP	3 JUN 82	
İ		10367	USSR		SEP	
1977 0920		10368	USSR		4	
		10408	USSR	20 SEP		
1977 0925		10371	4640		5	
1		10372	assn	- 1	3	
		10373	USSR	22 SEP	_	
¥\$60	1	10374	30			
1977 095A COSMOS	05 956	10375	USSR	24 SEP 24 SED	27 JUN 82 1 NDV 82	
096A	INTERCOSMOS 17	10376	USSR		NO	
-1		10377	USSR		d s	
0960	,	10379	USSR	24 SEP	20 APK 78	
1977 097R		10383	USSR		_	# d8
- 1		10384	USSR	29 SEP	130	
٠.		10533	USSR		_	
1977 6976		10545	USSR	29 SEP	APR	
		10547	USSR	29 SEP		
1977 C976		10553	USSR	ı	MAY	
- 1		10596	USSR	- 1	XX	
		10597	USSR		MAR	
1		10598	USSR	29_SEP		
1977 097M		10685	USSR		6 MAR 78	

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1977 LAUNCHES (CONT.)					
1977 097P	10687	USSR		6 MAR 78	
1977 0978 1977 097R	10730 10740	USSR		1	
	10743	USSR		T JUN 7	
1770 1771	10101	1558		7A.	
	11033	USSR		DCT.	
	11035	USSR	1		
1977 0972	11036	USSR		14 APR 79	
1977 097AA	11093	USSR		12 DEC 78	
1977 097AC	11095	USSR		28 JAN 79	
1977 097AE 1977 097AF	11096	USSR	29 SEP	19 DEC 78	
	11338	USSR		S T	
1977 097AK	11340	USSR		3 MAY 79	
1977 097AL	11342	USSR		MA S	
יך די	11431	USSR			
	11433	USSR		ڄ	
ן די	11435	USSR		1	
ן די	11468	USSR	ŧ	C	
1977 097AX	11470	USSR		ဌ	
1977 097AY 1977 097AZ	11471	USSR		NA.	
1977 097BB	11480	USSR		2	
- [	11483	USSR	ľ	26 AUG 79	
- 1	11495	USSR	- 1	- 1	
1977 0978H	11501	USSR	- 1	DE C	
1977 0978J	11503	USSR		21 DEC 79	
1977 097BL	11504	USSR		CT R	
1977 0978N	11523	USSR		9 NOV 79	

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1977 LAUNCHES (CONT.						
1		11740	USSR	l		
1977 09785 1977 0978T		11893	ASSII ASSII	29 111	A CFP AO	
- 1		11930	355A	- 1	- 1	
_		11931	USSR			
_ [		11934	U5SR	- !	SEP	
1977 0978X		11935	USSR	29 SEP	15 OCT 80	
		11937	11SSR			
1977 097CA		11942	USSR	- 1	14 SEP 80	
		11947	USSR			
		11955	USSR	ł		
1977 0970		11956	USSK	29 SEP	21 UCI 80	
		11958	USSR	1	SEP	
93260 2261		11966	USSR	- 1	23 NOV 80	
1977 097СН		11967	USSR			
		11972	USSR	- 1	2	
		11973	asson:			
1011 COACE		11076	88311	30 050	12 001 80	
1911 091CH		12090	11550	- 1	3	
		12390	USSR		MAY	
93790 7791		12391	USSR	29 SEP	22 JUN 81	
		12392	USSR		29 APR 81	
033 0036		1 2 2 0 4	83311	20 050	A MAY 81	
1911 091C1		12205	ASSO		Ž	
		12398	USSR		NO	
1977 097CH		12436	USSR	29 SEP	Ł	
		12437	USSR	29 SEP		
1		12420	03311	29 650	7 111 81	
1977 09704		12440	7550 11550	t		
		12441	USSR		HAY	
2017 09706		12444	USSR	- 1	#	
_		12476	USSR			
1		12420	#AAA	20 050	21 111 81	
		1.24.70	11550	- 1	3	
1977 0970H		12488	USSR		SEP	
		12489	USSR	- 1	- 1	
_		12493	USSR			
- 1	766	10385	HSSN	1	1	
		10386	NS SO	30 SEP	12 OCT 77	
1977 098D		10388	USSR	ŀ		
		10406	USSR	- 1	- 1	
		10407	USSR	30 SEP	13 OCT 77	
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NATIONAL DESIGNATION	NAME	CATALOG NUMBER	SOURCE	LAUNCH
1977 LAUNCHES	S (CONT.)			
		10402	USSR	9 001
	CU3MU3 950	10404	USSR	11 007
1977 1006 1977 1000		10405	USSR	11 007
-		10427	USSR	
		10428	USSR	
1977 101A	COSMOS 959	10419	USSR	21 OCT
1977 1016		10420	USSR	- 1
1		10424	<b>58</b>	# 8
	COSMOS 960	10430	USSR	
		10432	USSR	1
1977 1048	102/02 701	10435	USSR	- 1
		10456	#55R	130 8c
1977 1050		10466	#35R	1
	COSMOS 964	10498	USSR	
· 1		10500	USSR	4 DEC
1977 110E		10523	USSR	- 1
1977 1118	כסק כטחכטט	10503	USSR	
1977 1110		10682	USSR	9 DEC
1977 111E		10683	USSR	1
ı		10742	USSR	1
		10780	USSR	1 .
		10789	USSR	
1977 111M		10797	USSR	-
1977 111N		10809	USSR	
		10814	USSR	- 1
l		10815	USSR	3 .
1977 1111		10817	USSR	
1977 11110		10850	US-5R	- 1
1977 111V		10859	USSR	1
		10892	USSR	
- 1		10909	11888	- 1
1977 ; ; ; ; ;		10909	CSSR	

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	DESIGNATION	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1977 LAUNCHES	ES (CONT.)					
į		10923	USSR	8 DEC 8 DEC	24 AUG 78	
1	SOYUZ 26	10506	USSR		16 JAN 78	₩.
1	COSMUS 966	10510	USSR		DEC	
		10534	USSR	12 DEC		
1977 1150		11072	Sn		9 OCT 81	
1977 1204 1977 1208		10530	USSR		26 DEC 77	
1977 1206		10550	USSR		i	
		10551	HSSN	20 DEC	5 MAR 78	
1977 120F		10532	USSR			
l		10546	USSR		31 DEC 77	
1977 124A	COSMOS 973	10542	USSR		JAN	
- 1		10543	USSR		25 056 22	
1977 1240		10558	USSK	27 DEC	¥ 4	
		4 2 2 2 4	11669	7	10 IAN 78	
1978 0018	t the course	10555	USSR	A JAN		
- 1		10556	HS3D	NAL A	25 JAN 78	
		10601	455D		2	1
1978 003A	SOYUZ 27	10560	USSR	10 JAN	16 MAR 78	# ₩
1978 0038	COSMOS 984	10592	USSR	Ţ -	JAN	
		10593	HSSB	JAN CC	A FFR 78	
	PRUGRESS 1	10603	0.55E	1	4	
1978 0098		10606	USSR		12 MAR 78	
1978 0096		10608	USSR	24 JAN	į .	
1979 0104	986 30MSUJ	10607	USSR			
	,	10609	USSR	24 JAN	28 JAN 78	
1978 611A	#¥0 8	10612	PRC		F 18 1	
		10638	30		14 EER 78	
	COSMOS 987	10639	USSK	31 JAN	FEB 7	
1976 013C		10641	USSR		5 FEB 78	
		10670	USSR	l	FEB	
1978 015E		10665	JAPAN	4 FE8	12 FEB 79	

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1978 LAUNCHES	ES (CONT.)				-	
1978 015A	CUSMUS 988	10666	USSR	8 FEB	20 FEB 78	
		10668	USSR	8 FEB	HAR 7	
		10679	USSR	8 FEB	22 FEB 78 2 MAR 78	
		10681	USSR	8 FE8	11 MAR 78 24 FEB 78	
1978 017A	COSMOS 989	10672	USSR	14 FEB	FEB	
		10690	USSR	14 FEB	17 FEB 78 1 MAR 78	
	80 YUY 28	10694	USSR	14 FEB 2 MAR	28 FEB 78	
1978 024B		10697	USSR	2 MAR	5 HAR 78	
1	COSMOS 992	10699	USSR	→ MAR	- T	
		10701	USSR	+ MAR	5 MAR 78	
1		12229	S	5 MAR	MAY	
1		12239	S	5 HAR	E	
1		12248	ÜŠ	U HAR	AUG.	
1 .		12252	SO	5 MAR	1	
Į.		12255	S	5 MAR	1	
1		12264	S. O.S	5 MAR	E C	d:
1 _		12275	SO	5 HAR	- 1	)占 .
		12282	S	5 MAR	APR	306
	COSMOS 993	10725	USSR	1	1	δ (
1		10727	USSR		1	IAU
į .		10733	C 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	16 MAR	- 1	ш
	COSMOS 995	10735	USSR	17 HAR	1.	7
İ		10770	USSR		30 MAR 78	
	203mu3 770	10772	USSR	30 MAR	2 APR 78	
1978 033A	COSMOS 999	10773	USSR WSSN			
4	1	10774	0007	00 EXX	IC APR 10	

DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY
1978 LAUNCHES	S (CONT.)				
1		10798	USSR	30 MAR	13 APR 78
1978 033E		10800	USSR		APR
	COSMOS 1001	10783	WSSA	A A A D D	4 APR 4
		1000	855H	APR APR	
1		10805	USSR	A APR	2 HAY 78
		10806	3333	901	3
	0001	10810	USSK	4 APK	404
1978 0378		10786	USSR	6 APR	APR
- 1		10790	USSR		4
		10791	USSR	6 APR	24 APK 78
1978 0408		10812	USSR		APR
- 1		10013	USSR	ı	1
		10821	USSR	20 APR 20 ABB	A MAY 78
1978 041A	нсм	10818	Sn	-	-
	1	9001	95511	S MAY	Ā
	CUSMUS 1004	10842	ACCO	- 1	MAX
1978 043C		10848	USSR	S HAY	9 HAY 78
1978 0430		10850	USSR	T -	14 HAY 78
- 1		10851	USSR	•	\$
	1000	10852	USSR USSB	5 MAY	16 JUN 78
1978 0468		10863	USSR	12 MAY	6 DEC 78
	COSMOS 1007	10895	USSR	16 MAY	1
1970 0761		10897	A33U	16 MAX	X¥X
ı		10921	USSR	16 MAY 16 MAY	31 MAY 78
1978 0485	CDSMDS 1008	10898	USSR		8 JAN 81
1		10899	USSR	17 MAY	17 DEC 78
		10901	WS50	ŧ	9 050
1978 049E		10902	USSR		17 JUL 78
- 1	0001 907303	10903	USSR	19 MAY	_
1978 050A	3	10905	USSR		3
l		10906	USSR	19 MAY	18 JUL 78 23 MAY 78
1978 6500	CDSM05 1010	10915	USSR		NOT S
- 1	;	10916	USSR	1	į
	•	10928	USSR	23 MAY 25 MAY	7 JUN 78
1978 054A	C05M05 1012	10001	USSR		,-

DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY
1978 LAUNCHES	ES (CONT.)				
		10927	USSR	2 JUN	- 1
1978 057A	COSMOS 1021	10939	USSR		2
		10963	USSR	NO 01	- 1
		10943	US		NO.
- 1	2301 CUNCUS	10945	USSR	12 JUN	16 JUN 78
1978 059D		10966	USSR	12 JUN	28 JUN 78
1978 060A		10948	SO	1 JUN	24 JUL 78
		10957	Sn	14 JUN	18 JUN 78
		10959	US S	- 1	- 1
	30102 67	10956	USSR		N V
	S0YUZ 30	10968	USSR		Ē
		10971	USSR	- 1	- 1
	COSMOS 1026	10977	USSR	2 JUL 2	
	PROGRESS 2	10979	USSR		≱06
		10982	SO	1	030
- 1		10986	USSR	•	کر ون
1		10989	USSR	1	- 1
1978 0768	CUSMUS IVZO	10996	USSR	5 AUG	1
		11014	USSR	5 AUG	4 SEP 78
1978 0778	PROOKE 33 3	11000	USSR	7 AUG	- 1
1978 078A	MULTIPROBE BUS	62033	8	8 406	9-056-78
1978 0788	PIONEER PROBE	12102	911	8 AUG	8 AUG 78
1		12104	US	1	#
		12105	US	Ī	DEC
1978 0798	PI UNCER PRUBE	12106	SO	12 AUG	23 OCT 78
		00011	055R	25 AUG	15 SEP 78

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LAUNCHES 0818 0828 0828 0820 0820 0830 0830 0836 0856 0856 0856	(CUNT.)					
0818 0828 0828 0820 0830 0830 0830 0830 0854 0854 0856	W05 1029					
0818 0828 0828 0820 0820 0830 0830 0830 0854 0856 0856 0856	HOS 1029					
0828 0828 0820 0820 0830 0830 0840 0854 0858 0858 0856	1029	11011	USSR	_	28 AUG 78	
0828 0820 0820 0830 0836 0836 0858 0858 0856 0856		11012	USSR	1	1	
0820 0820 0830 0836 0836 0858 0856 0856 0856		11013	3880		SEP.	
0820 0830 0830 0834 0854 0856 0856 0850		81011	****	i	1	
0837 0837 0858 0858 0850 0850 0850		11019	USSK	29 AUG	10 SEP 18	
0854 0854 0855 0856 0850 0850		11017	USSR	6 SEP	SEP	
0854 0854 0856 0856 0850 0850		11077	USSR	9 SEP	10 559 78	
085A 085A 085C 085C 085B 086B		11021	USSR		SEP	
085A 0858 0850 0850 0868	- 1	12027	USSR	1		
3983 0850 0850 0850 0868	COSMOS 1031	11022	USSR	9 SEP	22 SEP 78	
0850 0850 0868 0868		11024	40011	1	l	
0.86B		11021	A550	- 1	9	
3983		11026	USSR	14 SEP		
	1.0	12028	USSR	14 SEP	- 1	
1978 J88A CUS		11029	USSR	19 SEP	001	
1978 0888-		11030	USSR	1		
		11037	USSR	19 SEP	2 OCT 78	
0880			1000.	1		
089A	CDSMDS 1033	11039	USSK	3 UCT		
1070 040C		11063	USSR	3 OCT		
0004	DBOCBECC A	11040		- 1	130	
6060 690B		11043	USSR	3 OCT		
4000	COSMUS 1042	11052	USSR	198	3	
0928		11053	USSR	6 OCT		
- 1		11070	USSA	1		
		11071	0258	120 61	20 DC1 70	
1978 0950		11059	USSR	13 OCT		
		11064	USSR		31 OCT 78	
A760	CD SMUS 1044	11065	USSR			
- 1		11066	2331	1100	21 001 78	
		11067	USSK	. 1	3	
1978 097E		11069	USSR	_		
4000	INTERCOSMOS 18	11082	USSR	ŧ	4	
9660		11083	USSR		HAY	
3660	1	11110	CZECH	20 051	22 OCT 80	
101A	PROGNOZ 7	11088	USSK	30 UCT	307	
9 5		11089	USSR		N O N	
1010	COCMUS 1046	11008	855N	- 1	12 NOV 78	
	2101 5046	11099	USSR	NON T	7 NOV 78	
- 1		11103	MSSB	<b>₹04 -</b>	3	
		11104	USSR	NON I		
		11105	HS-SH	*O* *	2	
1978 102F		11106	USSR.	AON T	14 NOV 78	

NATION NAME NUMBER SOURCE LAN  LANGCHES (CONT.)  133A HEAU 2  11101 US  11102 USS  11404 COSMOS 1047 11109 USS  11404 COSMOS 1047 111109 USS  11404 COSMOS 1047 11110 USS  11404 COSMOS 1047 11110 USS  11404 COSMOS 1049 11111 USS  11404 COSMOS 1049 11111 USS  11405 COSMOS 1049 11111 USS  11406 COSMOS 1049 11111 USS  11406 COSMOS 1049 11111 USS  11406 COSMOS 1049 11111 USS  11406 COSMOS 1049 11111 USS  11406 COSMOS 1040 11111 USS  11406 COSMOS 1041 11114 USS  11406 COSMOS 1045 1049 11114 USS  11406 COSMOS 1045 1049 11114 USS  11406 COSMOS 1045 1041 1114 USS  11406 COSMOS 1045 1045 1114 USS  11406 COSMOS 1045 1045 1114 USS  11406 COSMOS 1045 1045 1114 USS  11406 USS  11407 USS  11408 COSMOS 1045 1114 USS  11408 USS  11408 USS  11408 USS  11408 USS  11409 USS  1140			30 000				* / 10 1010
NATION NAME NUMBER SOURCE LAWICH DEÇAY  LAUNCHES (CONT.)  1030. HEAD 2  1040. COSMOS 1047  11100  1040. COSMOS 1047  111100  1040. COSMOS 1047  111100  1040. COSMOS 1047  111100  111100  1040. COSMOS 1047  111100  111100  111100  1040. COSMOS 1047  111100  11110		A OLC		315 50	11176		i
NATION NAME NUMBER SOURCE LAWICH DEÇAY  LAWICHES (CONT.)  LAWICHES		JAN		USSK	111/9		
LAUNCHES (CONT.)  LAUNCHES (CO		4		055K	11173	CO5MO5 1069	- 1
NATION NAME NUMBER SOURCE LAUNCH DEÇAY  LAUNCHES (CONT.)  LAUNCHES		LAN		USSR	11227		
LAUNCHES (CONT.)		Į		BSSR	11226		
NATION NAME NUMBER SOURCE LAUNCH DEÇAY  LAUNCHES (CONT.)  133 HEAU 2 11101 US 13 NOV 25 HAR 82 14 NOV 78 14 NOV 78 14 NOV 78 14 NOV 78		LAN		USSR	11172		
NAME   NUMBER   SOURCE   LAUNCH   DEÇAY		4		USSR	1177	1	1011
NATION NAME NUMBER SOURCE LAUNCH DEÇAY  LAUNCHES (CONT.)  LAUNCHES		L N		1558	11169		
ANNELS (CONT.)  ANNELS (CONT.)		5		6557	17631		L _
LAUNCHES (CONT.)  LAUNCHES (CO				doon NCCO	11636		- 1
LAUNCHES (CONT.)  LAUNCHES (CO		MAR		USSR	11248		
LAUNCHES (CONT.)  LAUNCHES (CO		**		USSR	11244		- 1
LAUNCHES (CONT.)  103A HEAU 2 11101 US 13 NOV 25 HAR 82 15 NOV 13 HAP 73 15 HAP				USSR	11243		
LAUNCHES (CONT.)  LAUNCHES (CONT.)  LOSAL HEAD 2  LOSAL COSMOS 1047  LITTO  LOSAL COSMOS 1047  LITTO  LOSAL COSMOS 1047  LITTO  LOSAL COSMOS 1047  LITTO  LOSAL COSMOS 1047  LITTO  LOSAL COSMOS 1047  LITTO  LOSAL COSMOS 1047  LITTO  LOSAL COSMOS 1047  LITTO  LOSAL COSMOS 1047  LITTO  LOSAL COSMOS 1047  LITTO  LOSAL COSMOS 1047  LITTO  LOSAL COSMOS 1047  LITTO  LOSAL COSMOS 1047  LITTO  LOSAL COSMOS 1047  LITTO  LOSAL COSMOS 1050  LOSAL COSMOS 1050  LOSAL COSMO		<b>*</b>		## ## ## ## ## ## ## ## ## ## ## ## ##		ł i	ı
LAUNCHES (CONT.)  103A HEAD 2 11101 US 13 NOV 25 HAR 82 15 NOV 12 HAR 82 15 NOV 13 HAR 79 16 NOV 14 HAR 79 16 NOV 15 NOV 15 NOV 78 NOV		AUG C		USSR	11163		1978 1204
LAUNCHES (CONT.)  LAUNCHES (CONT.)  133A HEAU 2 11101 US 13 NOV 25 HAR 82 15 NOV 12 HAR 82		APK		US	11159		
LAUNCHES (CONT.)  LAUNCHES (CO				035K	25111		- 1
LAUNCHES (CONT.)  LAUNCHES (CONT.)  LOJA HEAD 2 11101 US 13 NOV 25 MAR 82 1978 1978 1978 1978 1978 1978 1978 1978		Z C Z		USSR	11151		
NATION NAME NUMBER SOURCE LAUNCH DEÇAY  LAUNCHES (CONT.)  L33A HEAU 2 11101 US 13 NOV 25 MAR 82 123B HEAU 2 11101 USSR 15 NOV 13 MAR 79 124B L71B USSR 15 NOV 28 NOV 78 124B L71B USSR 15 NOV 29 NOV 78 124B L71B USSR 15 NOV 29 NOV 78 124B L71B USSR 21 NOV 29 NOV 78 124B L71B USSR 21 NOV 29 NOV 78 124B L71B USSR 21 NOV 29 NOV 78 124B L71B USSR 21 NOV 29 NOV 78 124B L71B USSR 21 NOV 29 NOV 78 124B L71B USSR 21 NOV 29 NOV 78 124B L71B USSR 21 NOV 19 NEC 78 124B L71B USSR 21 NOV 19 NOV 19 NOV 19 124B L71B USSR 21 NOV 19 NOV 19 124B L71B USSR 21 NOV 19 124B L71B USSR 21 NOV 19 124B L71B USSR 21 NOV 19 124B L71B USSR 21 NOV 19 124B L71B USSR 21 NOV 19 124B L71B USSR 21 NOV 19 124B L71B USSR 21 NOV 19 124B L71B USSR 21 NOV 19 124B L7		1		USSR	11150	CB5MB5 1062	
NATION NAME NUMBER SOURCE LAUNCH DEÇAY  LAUNCHES (CONT.)  139A HEAU 2 11101 US 13 NOV 25 HAR 82 193B USSR 15 NOV 28 NOV 78 104C 111108 USSR 15 NOV 28 NOV 78 104C 11110 USSR 15 NOV 28 NOV 78 104C 11110 USSR 15 NOV 28 NOV 78 104C 11110 USSR 15 NOV 28 NOV 78 104C 111110 USSR 15 NOV 28 NOV 78 104C 111110 USSR 21 NOV 28 NOV 78 104C 111110 USSR 21 NOV 28 NOV 78 104C 111110 USSR 21 NOV 28 NOV 78 104C 111110 USSR 21 NOV 26 NOV 78 104C 18 NOV 28 NOV 78 104C 18 NOV 28 NOV 78 104C 18 NOV 28 NOV 78 104C 18 NOV 28 NOV 78 104C 18 NOV 28 NOV 78 104C 18 NOV 28 NOV 78 104C 18 NOV 28 NOV 78 104C 18 NOV 12 NOV 78 104C 18 NOV 12 NOV 78 104C 18 NOV 12 NOV 78 104C 18 NOV 12 NOV 78 104C 18 NOV 12 NOV 78 104C 18 NOV 12 NOV 78 104C 18 NOV 18 NOV 78 104C 18 NOV 78 104C 18 NOV 18 NOV 78 104C 18 NOV 78		LAN		USSR	11167		
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1979 043A	CD SMDS 1102	11368	USSR	25 MAY	NOC	
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1979 0430		11365	15.58 15.58	- 6		
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1979 045E		11402	USSR		ļ '	
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1979 048C		11386	USSR	ľ	NON	
- 1	SDYUZ 34	11387	USSR		974	
		11388	USSR	NOC 9	62 NOT 6	
- 1		11411			23 EEB 82	
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1979 C52A	CUSMUS 1105	11394	USSR	•	N N	
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063P 11598 063R 11603 063R 11603 063S 11617 063T 11618 063U 11625 063V 11625 063X 11626 063X 11627 063Z 11627 063A COSMOS 1113 11448 064A COSMOS 1114 11450 066A COSMOS 1115 11452 066A COSMOS 1115 11452 066A COSMOS 1117 11460 066A COSMOS 1117 11460 066A COSMOS 1117 11460 066A COSMOS 1117 11462
063R 11603 063S 11617 063V 11620 063W 11626 063X 11628 063X 11628 063X 11628 063X 11628 063X 11628 064A COSMOS 1113 11448 064A COSMOS 1114 11460 065A COSMOS 1115 11459 066B COSMOS 1115 11459 066C 11452 066C 11462
063I 11618 063V 11629 063V 11625 063X 11626 063X 11626 063X 11628 063AB 11644 064A COSMOS 1113 11449 065B COSMOS 1115 11451 066B COSMOS 1115 11452 066C 11462 066C 11462
0638
063H 11625 063X 11626 063Z 11628 063AA 1162B 064A COSMOS 1113 1144B 064C 11449 064C 11449 065A COSMOS 1114 11451 066A COSMOS 1115 11451 066B COSMOS 1117 11462 066C 11462
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0658
0666 11452 066C 11462 060A COSMUS 1117 11463 068B 11464
0688 CUSIUS 1117 11464
068D 11482
1979 368E 1118 11465 USSR USSR
1979 0690 11466 USSR 11477 USSR
0706 11475
COSMOS 1119 11470

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1979 LAUNCHES	ES (CONT.)					
Į.	COSMOS 1120	11485	USSR	11 AUG	24 AUG 79	
1979 073C		11505	USSR	11 AUG	AUG	
- 1		11506	USSR	- [	904	
	CDSMUC 1121	11487	USSR	14 AUG	13 SEP 79	
1	COSMOS 1122	11491	USSR	17 AUG		
1979 6758		11498	USSR	17 AUG	27 AUG 79	
- {		11499	ASSU	- 1	304	
	9	11507	USSR		AUG	
1979 076A	C05M05 1123	11497	WASTI TO SEE	21 AUG	24 AUG 79	
		11517	835A		4	
١ ـ		11518	USSR	_		
- 1		11519	USSR	H		
1979 077B		11512	USSR	28 AUG	28 SEP 79	
1979 C79A	COSMOS 1126	11515	USSR		SEP	
		11516	USSR	ı		
		11524	USSR	31 AUG	26 OCT 79	
1979 079E		11526	USSR		FEB	
- 1		11527	USSR	- 1	SEP	
	1	11528	USSR	31 AUG	17 OC: 79	
1979 080A		11521	USSR	5 SEP	SEP	
- 1		11522	USSR	6 SEP	SEP.	
		11531	USSR	5 SEP	30 SEP 79	
1979 0818		11530	USSR	14 SEP	SEP	
ł		11547	435U	-1		
	HEAD 3	11532	Sn	20 SEP	7 DEC 81	
1979 083A	COSMOS 1129	11536	USSR	i		
- 1		11537	HSSP.	25 SEP	31 001 79	
		11579	USSK	25 SEP 25 SEB		
1979 083E		11582	USSR		MAR	
- 1	COSMOS 1138	11548	USSR	ŀ	3	
		11549	USSR	28 SEP	5 OCT 79	
1979 0850		11576	USSR		000	
		11577	HSSH	28 550	3	
		11578	USSR	28 SEP	26 FEB 80	
1		11542	do Sil	l	120	
1979 0878	CD CMDC 1139	11564	assn	5 001	30	
í	1644 COUCDS	11565	USSR			

l led	NAME	CATALOG NUMBER 11588	SOURCE USSR	1 1 1 1
		11588 11590 11591	USSR USSR USSR	
0928 0926 0920	COSMOS 1142	11593	USSR USSR USSR	.
092F 092F 094A	HAGSAT	11606	USSR US	1 1
	INTERCOSMOS 20	11607	USSR USSR	1 1
1 1	COSMOS 1144	11612	USSR USSR US	4 3
1979 1006 1979 1016 1979 102A	COSMOS 1147	11636 11637 11637 11638	USSR USSR	1 1
i	5870Z T-1	11646 11647 11640	USSR USSR USSR USSR	
		11659 11651 11660	ESA ESA USSR USSR	
1066 1068	COSMOS 1148	11649 11650	USSR USSR USSR	
1979 106E 1979 106E 1978 106F		11657	USSR	
8170 <b>41</b> 00	COSMOS 1149	11652	USSR USSR	1
		11676	USSR	
		11674	USSR	
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		DACA
		LAUNCH
		SOURCE
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		NAME
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1990   0.25   11.04   0.25   11.04   0.25   11.04   0.05   0.05   11.04   0.05   0.0	DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
0.02.0         11665         USSR         11 JAN         > <td>(CONT</td> <td></td> <td></td> <td></td> <td></td> <td></td>		(CONT					
OUGGA         CUSKUS         11678         USSR         23 JAN         6 FEB           OUGGA         CUSKUS         11678         USSR         23 JAN         6 FEB         12 FEB         12 FEB         12 FEB         12 FEB         12 FEB         12 FEB         13 RAR         14 RAR <t< td=""><td></td><td></td><td>11665</td><td>USSR</td><td>11 JAN</td><td>NA.</td><td></td></t<>			11665	USSR	11 JAN	NA.	
0.49         COSMUS 1155         11685         USSR         7 FEB         12 FEB           0.49         11711         USSR         7 FEB         11 717           0.49         11711         USSR         7 FEB         10 AR           0.00         11711         USSR         7 FEB         10 AR           0.10         1172         USSR         7 FEB         10 AR           0.10         1172         USSR         7 FEB         10 AR           0.10         1172         USSR         7 FEB         10 AR           0.11         1170         USSR         1 FEB         1 AR           0.12         1170         USSR         1 FEB         1 AR           0.13         1170         USSR         1 FEB         1 AR           0.14         USSR         1 FEB         1 AR         1 AR           0.15         1170         USSR         1 FEB         1 AR           0.15         1170			11678	USSR	,	FEB.	
1771   USSR   7 FEB   1771   USSR   7 FEB   1771   USSR   1771   USSR   1771   USSR   1771   USSR   1771   USSR   1771   USSR   1771   USSR   1771   USSR   1771   USSR   1771   USSR   1771   USSR	1		11685	USSR	1 .	* u	
0.09 Colored         11711         USSR         7 FEB         13 MAR           0.09 Colored         11717         USSR         7 FEB         13 MAR           0.10 Colored         11717         USSR         7 FEB         10 OCT           0.10 Colored         11689         USSR         7 FEB         10 OCT           0.10 Colored         11700         USSR         11 FEB         17 MAR           0.13 Colored         11700         USSR         12 FEB         10 MAR           0.14 Colored         11700         USSR         12 FEB         10 MAR           0.15 Colored         11700         USSR         12 FEB         10 MAR           0.15 Colored         11700         USSR         12 FEB         10 MAR           0.15 Colored         11700         USSR         20 FEB         10 MAR           0.15 Colored         11700         USSR         20 FEB         10 MAR           0.15 Colored         11700         USSR         20 FEB         10 MAR           0.15 Colored         11700         USSR         20 FEB         21 FEB         20 JAR           0.15 Colored         11700         USSR         21 FEB         20 JAR         20 JAR	- 1	- 1	11686	USSR	7 568	9	
1117   1128			11711	USSR	7 FEB	TAR	
1990   1991   1991   1992   1993   1994   1995			11717	USSR	7 FEB	APR	
11688   US	i		11687	Sn	7 FEB	130	
012K         CUSKNUS 1164         11725         USSR         11 FEB         5 HAR           013A         1170         USSR         12 FEB         10 HAR           013G         1170         USSR         12 FEB         10 HAR           013G         1170         USSR         12 FEB         10 HAR           015G         1170         USSR         12 FEB         12 HAR           015G         1170         USSR         12 FEB         12 HAR           015G         1170         USSR         20 FEB         22 FEB           016G         1170         USSR         20 FEB         22 FEB           016G         1171         USSR         20 FEB         22 FEB           017A         COSHOS 1165         1171         USSR         20 FEB         12 HB           017A         COSHOS 1167         1171         USSR         21 FEB         22 FEB           017A         LITTA         USSR         21 FEB         22 FEB         19 JM           017A         LITTA         USSR         21 FEB         22 FEB         19 JM           018G         LITTA         USSR         11 HAR         10 CM           018G         LITT			11688	S	7 FEB	MAR	
U134         CUSCHIST 1164         11700         USSR         12 FEB         13 APR           0135         11701         USSR         12 FEB         3 APR           0136         11702         USSR         12 FEB         3 APR           0156         11702         USSR         12 FEB         3 APR           0156         11702         UARAN         17 FEB         20 ABR           0156         11702         UARAN         17 FEB         20 ABR           0156         11702         UARAN         17 FEB         20 ABR           0156         11702         UARAN         17 FEB         20 FEB           0156         11704         USSR         20 FEB         12 FEB           0157         11709         USSR         20 FEB         12 FEB           0158         11710         USSR         20 FEB         12 FEB           0159         1171         USSR         21 FEB         12 FEB           0150         1172         USSR         21 FEB         12 FEB           0150         1172         USSR         4 ARR         18 ABR           0160         1172         USSR         4 ARR         18 ABR			11725	USSR	i	Ž Ž	
11701   USSR   12 FEB   10 MAR   10 M		CD SMBS 1164	11700	USSR		1	
1949   1958   12 FEB   8 NOW   15 FEB   13 NAW   15 FEB   12 NAW   12 FEB   12 NAW   12 FEB   12 NAW   12 FEB   12 NAW   12 FEB   12 NAW   12 FEB   12 NAW   12 FEB   12 NAW   12 FEB   12 NAW   12 FEB   12 NAW   12 FEB   12 NAW   12 FEB   12 NAW   12 FEB   12 NAW   12 FEB   12 NAW   12 FEB   12 NAW   12 FEB   12 NAW			11701	USSR		MAR	
11766   11766   11766   11766   1276			11949	USSR		Ş	
11707   JAPAN   17 FEB   20 JAN   17 FEB   20 JAN   17 FEB   21 JUN   17 FEB   21 JUN   17 FEB   21 JUN   18 FEB   21 JUN   18 FEB   22 JUN   18 FEB   22 JUN   18 FEB   22 JUN   18 FEB   22 JUN   18 FEB   22 JUN   18 FEB   23 JUN   18 FEB   23 JUN   18 FEB   24 JUN   18	0154	TANSEI 4	11706	JARAN	- 1	¥	
CUISO         11948         JAPAN         17 FEB         8 GCT           CUISO         11709         USSR         20 FEB         22 FEB           CUISC         11709         USSR         20 FEB         12 JAPA           OLIGE         11802         USSR         20 FEB         12 JAPA           0106         11802         USSR         20 FEB         12 JAPA           0117         1172         USSR         21 FEB         12 JAPA           0118         1172         USSR         21 FEB         25 FEB           0110         1172         USSR         21 FEB         25 FEB           0110         1172         USSR         21 FEB         25 FEB           0110         1172         USSR         4 HAR         19 JUL           0100         1172         USSR         4 HAR         19 JUL           0200         1172         USSR         4 HAR         19 JUL           0200         1173         USSR         4 HAR         10 HAR           0200         1173         USSR         4 HAR         10 HAR           0200         1173         USSR         4 HAR         10 HAR           0210 <td< td=""><td></td><td></td><td>11707</td><td>JAPAN</td><td></td><td>AAN</td><td></td></td<>			11707	JAPAN		AAN	
0166         USSR         20 FEB         22 FEB           0166         11710         USSR         20 FEB         22 FEB           0166         11802         USSR         20 FEB         12 JAN           0176         11802         USSR         20 FEB         15 JAN           0176         11713         USSR         21 FEB         15 AN           0176         1172         USSR         21 FEB         27 FEB           0177         1172         USSR         21 FEB         27 FEB           0176         1172         USSR         21 FEB         27 FEB           0177         1172         USSR         21 FEB         24 FEB           0186         1172         USSR         4 HAR         18 HAR           0204         1172         USSR         4 HAR         18 HAR           0205         1172         USSR         4 HAR         10 HAR           0206         1173         USSR         4 HAR         10 HAR           0207         11739         USSR         4 HAR         10 HAR           0216         11739         USSR         14 HAR         10 HAR           0216         1260         USSR </td <td></td> <td></td> <td>11948</td> <td>JAPAN</td> <td>1</td> <td>2</td> <td></td>			11948	JAPAN	1	2	
C16C         11710         USSR         20 FEB         22 FEB           0116F         11801         USSR         20 FEB         12 JAN           01176         USSR         20 FEB         12 AN           0177         USSR         21 FEB         25 FEB           0176         USSR         21 FEB         25 FEB           0177         USSR         21 FEB         25 FEB           018C         USSR         21 FEB         25 FEB           018C         USSR         21 FEB         26 FEB           018C         USSR         21 FEB         26 FEB           018C         USSR         4 MAR         18 MAR           020D         USSR         4 MAR         18 MAR           021D         USSR         4 MAR         18 MAR           021D         USSR         4 MAR         18 MAR         18 MAR           021C         USSR         14 MAR         18 MA	ł		11709	USSR	ı	94	
11802   10528   20 FEB   15 APR   11802   10558   21 FEB   25 FEB   17 APR   11714   11714   10558   21 FEB   25 FEB   21 FEB			11710	USSR		FE8	
0.174         COSMOS 1165         11713         USSR         21 FEB         2 JUN           0.18C         11716         11722         USSR         1 MAR         2 FEB         1 JUN           0.18C         11722         USSR         1 MAR         1 JUN         1 JUN           0.20D         11722         USSR         1 MAR         1 JUN         1 JUN           0.20D         11724         USSR         1 MAR         2 FEB         1 JUN           0.20D         11734         USSR         1 MAR         2 MAR         2 FEB         1 JUN           0.20D         11734         USSR         1 MAR         2 MAR         2 MAR         2 MAR         2 MAR         2 MAR         2 MAR         2 MAR         2 MAR         2 MAR         2 MAR         2 MAR         2 MAR         2 MAR         2 MAR         2 MAR			11802	USSR	1	APR	
0.176         11714         USSR         21 FEB         25 FEB           0.17C         11726         USSR         21 FEB         7 MAR           0.17C         11722         USSR         21 FEB         7 MAR           0.18C         11718         JAPAN         22 FEB         19 LUL           0.18C         11722         USSR         4 MAR         19 LUL           0.20A         COSMOS 1166         11723         USSR         4 MAR         19 MAR           0.20C         11734         USSR         4 MAR         28 APR           0.20C         11739         USSR         4 MAR         28 APR           0.21C         11739         USSR         14 MAR         1 MAR           0.21C         12605         USSR         14 MAR         22 AUG           0.21C         12609         USSR         14 MAR         22 AUG           0.21C         12609         USSR         14 MAR         22 AUG	<b>→**</b> 10	COSMBS 1165	11713	HSSN		4	
017C         11727         USSR         21 FEB         6 HAR           018C         11716         JAPAN         22 FEB         19 JUL           018C         11718         JAPAN         22 FEB         19 JUL           018C         11722         USSR         4 HAR         18 HAR           020G         11723         USSR         4 HAR         18 HAR           020G         11734         USSR         4 HAR         10 HAR           020G         11734         USSR         4 HAR         10 HAR           020G         11739         USSR         4 HAR         24 APR           020G         11739         USSR         4 HAR         24 APR           021G         USSR         14 HAR         10 CT         10 CT           021G         USSR         14 HAR         10 CT         10 CT           021G         USSR         14 HAR         22 AUG           0			11714	USSR		FEB	
0108         JAPAN         22 FEB         28 FEB           018C         11716         JAPAN         22 FEB         19 JUL           020A         020A         01722         05SR         4 MAR         18 MAR           020B         11724         05SR         4 MAR         18 MAR           020C         11724         05SR         4 MAR         18 MAR           020C         11734         05SR         4 MAR         28 APR           020C         11739         05SR         4 MAR         28 APR           020F         05SR         1 MAR         10 APR           021A         05SR         1 MAR         1 MAR         1 MAR           021B         05SR         1 MAR			11727	USSR	ŀ	AAR	
018C         JAPAN         22 FEB         19 JUL           0218D         USSR         4 MAR         18 MAR           0200         1172         USSR         4 MAR         18 MAR           0200         11724         USSR         4 MAR         18 MAR           0200         11734         USSR         4 MAR         10 MAR           0200         11734         USSR         4 MAR         28 APR           0200         11739         USSR         4 MAR         28 APR           0201         USSR         4 MAR         1 MAR         1 MAR           0210         USSR         14 MAR         1 MAR         1 DC           0210         USSR         14 MAR         1 MAR         1 DC           0210         USSR         14 MAR         12 AUG           0211         USSR         14 MAR         12 AUG           0210         USSR         14 MAR         12 AUG	- 1		11716	JAPAN	-		
020A         COSMUS 1166         11722         USSR         4 MAR         18 MAR           0200         USSR         1 MAR         1 MAR         10 MAR           0200         USSR         1 MAR         10 MAR         10 MAR           0200         USSR         1 MAR         28 APR         28 APR           0200         USSR         1 MAR         28 APR         4 MAR         28 APR           0210         USSR         1 MAR         1 MAR         1 MAR         1 DC           0210         USSR         14 MAR         22 AUG         22 AUG           0210         USSR         14 MAR         22 AUG         22 AUG           0210         USSR         14 MAR         12 AUG         22 AUG           0210         USSR         14 MAR         12 AUG         22 AUG           0210         USSR         14 MAR         12 AUG         22 AUG           0210         USSR         14 MAR         12 AUG         22 AUG           0210         USSR         14 MAR         12 AUG         22 AUG           0210         USSR         14 MAR         15 AUG         22 AUG           0211         USSR         14 MAR         1			11718	JAPAN		3	
0200         USSR         1 MAR         13 MAR           0200         11724         USSR         1 MAR         10 MAR           0200         11737         USSR         4 MAR         28 APR           0200         11739         USSR         4 MAR         28 APR           0206         11739         USSR         4 MAR         28 APR           0210         USSR         14 MAR         1 OCT           0210         USSR         14 MAR         1 DEC           0210         USSR         14 MAR         22 AUG           0210         USSR         14 MAR         12 AUG           0210         USSR         14 MAR         12 AUG           0210         USSR         14 MAR         12 AUG           0210         USSR         14 MAR         12 AUG           0210         USSR         14 MAR         12 AUG           0210         USSR         14 MAR         15 AUG           0210         USSR         14 MAR         15 AUG           0210         USSR         14 MAR         15 AUG           0210         USSR         14 MAR         22 AUG           0210         USSR         14 MAR<	020A	116	11722	USSR	+ MAR	AAR	
020C         11724         USSR         1 MAR         10 MAR           020D         11734         USSR         4 MAR         28 APR           020D         11739         USSR         4 MAR         28 APR           021A         021B         USSR         14 MAR         1 DCT           021B         11739         USSR         14 MAR         1 DCT           021C         12605         USSR         14 MAR         22 AUG           021C         12606         USSR         14 MAR         22 AUG           021C         12609         USSR         14 MAR         12 AUG           021G         12609         USSR         14 MAR         15 OCT           021H         12610         USSR         14 MAR         15 OCT           021H         12610         USSR         14 MAR         15 AUG           021H         12611         USSR         14 MAR         15 AUG           021H         12612         USSR         14 MAR         22 AUG           021H         12612         USSR         14 MAR         22 AUG           021L         12612         USSR         14 MAR         24 UG			11723	USSR	4 MAR	MAR	
020E         USSR         4 MAR         28 APR           020F         USSR         14 MAR         1 0CT           021A         USSR         14 MAR         1 0CT           021B         USSR         14 MAR         1 0CT           021C         USSR         14 MAR         2 AUG           021B         USSR         14 MAR         2 AUG           021C         USSR         14 MAR         2 AUG           021G         USSR         14 MAR         2 AUG           021G         USSR         14 MAR         15 DCT           021G         USSR         14 MAR         15 DCT           021G         USSR         14 MAR         15 DCT           021G         USSR         14 MAR         15 AUG           021J         USSR         14 MAR         12 AUG           021J         USSR         14 MAR         15 AUG           021L         USSR         14 MAR         22 AUG           021L         USSR         14 MAR         2 AUG           021L         USSR         14 MAR         2 AUG			11724	USSR	A MAR	AAR	
021A         CDSMOS         1167         11729         USSR         14 MAR         1 MAR         2 AUG           021U         12612         025R         1 MAR         1 MAR         1 MAR         2 AUG         1 MAR         2 AUG           021U         12612         055R         1 MAR         1 MAR         2 AUG         2 AUG           021U         12613         055R         1 MAR         2 AUG         2 AUG <td></td> <td></td> <td>11738</td> <td>USSR</td> <td>4 MAR</td> <td>APR</td> <td></td>			11738	USSR	4 MAR	APR	
021A         CDSMOS 1167         11729         USSR         14 MAR         1 DCT           021C         12605         USSR         14 MAR         1 DEC           021C         12605         USSR         14 MAR         2 AUG           021D         12606         USSR         14 MAR         22 AUG           021G         12609         USSR         14 MAR         12 AUG           021G         12609         USSR         14 MAR         15 DCT           021J         12610         USSR         14 MAR         15 DCT           021J         12610         USSR         14 MAR         22 AUG           021J         12612         USSR         14 MAR         22 AUG           021L         12612         USSR         14 MAR         2 AUG           021L         12613         USSR         14 MAR         2 AUG	- 1		11739	USSR	4 MAR	84	
0.21C         1.2605         USSR         14 MAR         6 AUG           0.21C         1.2606         USSR         14 MAR         1 DEC           0.21D         1.2606         USSR         14 MAR         2.2 AUG           0.21G         1.2607         USSR         14 MAR         2.2 AUG           0.21G         1.2609         USSR         14 MAR         1.2 AUG           0.21J         1.2611         USSR         14 MAR         2.2 AUG           0.21J         1.2612         USSR         14 MAR         2.2 AUG           0.21L         1.2612         USSR         14 MAR         2.2 AUG           0.21L         1.2612         USSR         14 MAR         2.2 AUG	021A		11729	USSR	14 MAR	001	
USSR         14 MAR         1 DEC           U210         USSR         14 MAR         1 DEC           U21E         12609         USSR         14 MAR         22 AUG           U21G         12609         USSR         14 MAR         15 DCT           U21H         USSR         14 MAR         14 DEC           U21J         USSR         14 MAR         22 AUG           U21K         12612         USSR         14 MAR         16 AUG           U21L         12613         USSR         14 MAR         2 AUG           U21L         USSR         14 MAR         2 AUG			12605	USSR	1	V V	
UZIE         12607         USSR         14 MAR         22 AUG           021F         12609         USSR         14 MAR         12 AUG           021G         12609         USSR         14 MAR         15 DCT           021J         USSR         14 MAR         22 AUG           021L         12612         USSR         14 MAR         16 AUG           021L         12613         USSR         14 MAR         2 AUG           021L         12613         USSR         14 MAR         2 AUG	- 1		12606	USSR	- 1	DE C	
C21G     L25G9     USSR     14 MAR     15 DCT       021H     12610     USSR     14 MAR     14 DEC       021J     USSR     14 MAR     22 AUG       021K     12612     USSR     14 MAR     2 AUG       021L     12613     USSR     14 MAR     2 AUG			12607	USSR		AUG	
12610   USSR   14 MAR   14 DEC   USSR   14 MAR   15 AUG   USSR   14 MAR   15 AUG   USSR   14 MAR   15 AUG   USSR   14 MAR   15 AUG   USSR   14 MAR   2 AUG   USSR   USSR   14 MAR   2 AUG   USSR   U	1		12608	85511	ı	5	
021J USSR 14 HAR 22 AUG 021K 12612 USSR 14 HAR 16 AUG 021L USSR 14 HAR 2 AUG	- i		12610	8550	- 1	9	
021K 14 MAR 16 AUG 021L 025R 14 MAR 2 AUG 021L 12613 025R 14 MAR 2 AUG 12615			12611	USSR		AUG	
U23L 14 MAR 2 AUG 0314 12615 1660 14 MAP 27 AUG			12612	USSR.		904	
			12013	USSK		AUG	

NATIONAL NATION	NAME	CATAL BG	SOURCE	LAUNCH	DECAY
1980 LAUNCHES	S (CONT.)				
- 1		12616	USSR	*	27 AUG
1980 0238	COSNOS 1169	11741	USSR	27 HAR 27 HAR	NOV +
1980 0248	PROGRESS 8	11743	USSR	27 MAR 27 MAR	26 APR 29 MAR
	C05M85 1170	11747	USSR	†	
ı		11748	USSR	1 APR	APR
		11755	USSR	1 APR	APR
- 1		11756	USSR	1 ×92	*
i .	77413 75	11757	USSR	1 APR	Г
1980 C278	30102 33	11754	USSR	9 APR	11 APR 80
		11759	USSR	12 APR	- 1
1900 0200		00111	H550	12 AFR	30 741 00
	COSMOS 1173	11763	USSR	17 APR	APR
	,	11786	USSR	17 APR	APR
1980 030B		11766	USSR	18 APR	20 APR 80
		11771	W55R	- 1	30 056 80
		11773	USSR	- 1	*
1980 030F		11774	USSR	18 APR	17 APR 81
		11780	USSR		
S0E0 0961		12344	USSR	18 APR	8 SEP 82
1980 030X		12346 12349	USSR	18 APR	24 APR 62 15 DEC 62
- 1		12355	USSR	ł	976
1980 030AA		12356	USSR	18 APR	21 MAR 82
1980 030AD		12359	USSR		A G
		12361			- 1
1980 030AG		12362	USSA USSA	18 APR	10 APK 02
	COSMOS 1175	11767	USSR		YAH
1980 0316		11769	USSR	18 APR	29 SEP 80
ł		11770	USSR	1	**
	PROGRESS 9	11784	USSR		HAY
ı		11785	135R	29 APR	A DCT 80
1980 0340		11969	USSR		SEP -
	COSMOS 1177	11789	USSR		Š
1980 035C		11840	USSR	29 APR	NOT 91
		11040	C007	4	

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0368 0368 0360 0360 0366	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1 1 1	(CONT.)					
1 1		11794	USSR	7 MAY	l	
1		11805	USSR	7 MAY	7 JUL 80	
		11806	USSR		3	
10.00		11807	USSR	7 MAY	22 JUN 80	
038A	CDSMUS 1180	11798	USSR	15 MAY	HAY	
1980 038C		11800	USSR	Į.	ΗΑΥ	
1980 0385	أوخالت والمتارية والمتارك والمتارك والمتارك والمتارك والمتارك والمتارك والمتارك والمتارك والمتارك والمتارك	11813	USSR	15 MAY	30 MAY 80	
- 1		11815	USSR		*	
A040	COSMOS 1182	11808	USSR	23 MAY	5 JUN 80	
j		11823	USSR		NO.	
1980 0400	SUV117 36	11824	#88H	23 MAY 26 MAY	31 JUN 80	
8140	- 1	11812	A55U	1	*	•
042A	COSMOS 1183	11816	USSR		N N	
1980 0426		11818	USSR	28 HAY	9 JUN 80	
- 1		11833	USSR		13 JUL 80	
		11834	USSR	28 MAY	3 AUG 80	
1980 0426		11836	USSR	I	l	1
4640	NOAA 8	11019	30	ł	*	
1980 0438		11820	US	29 MAY 29 MAY	11 SEP 80	
045A	S0YUZ T-2	11825	USSR	•	5	
1980 0458 1980 046A CO	COSMOS 1185	11827	USSR	1	20 JUN 80	1
89%0	1	11828	USSR	1	3	
		11853	USSR	NUL 9	4 JUL 80	ı
	COSMOS 1186	11829	USSR	NOT 9	_	•
		11830	1888 1888	N . 4	12 HIN 90	1
1980 0470		11031	A550	·		1
1980 047E		11913	USSR	NOC 9		
- 1		12407	USSR	1	X¥X	1
		12408	USSR	NOT 9	3 MAY 81	
1980 0471		12413	USSR	NUL 9		1
- 1		12414	USSR		*	
		12415	USSR	NOT 9	3 MAY 81	
1980 047M		12422	85511	NOT 9	MAY	ı
- }		12453	USSR		X	
		12459	USSR	NUL 9	20 MAY 81	

GNATION NAME 1  LAUNCHES (CONT.)  0477  0477  0477  0477  0477  0477  0477A  047AA  047AC  048B  049B  049B  049C  049B  049C	SOURCE  USSR USSR USSR USSR USSR USSR USSR US	LAUNCH  LAUNCH	DECAY  DECAY  DECAY  DECAY  DECAY  DECAY
LAUNCHES (CONT.)  0475 0477 0477 0477 0477 0477 0477 047	USSR USSR USSR USSR USSR USSR USSR USSR		TARE TO A CONTROL OF THE CONTROL OF
0475 0477 0477 0477 0477 0477 0477 0477	USSR USSR USSR USSR USSR USSR USSR USSR		
0477 0477 0477 0477 0477 0477 0477A 0477A 0477A 0477A 0477A 0477A 048B 049B 049B 049B 049B 049B 049B 049B 049	USSR USSR USSR USSR USSR USSR USSR USSR		
047V 047X 047X 0477 047AA 047AA 047AA 047AC 048B 048B 049C 049B 049C 049C 049C 049C 052B 052A 052A 052B	USSR USSR USSR USSR USSR USSR USSR USSR		
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047AC 048A 048B 048B 048B 049B 049C 049C 049C 049C 052B 052A 052A 053B 053B 053B	USSR USSR USSR USSR USSR USSR USSR USSR		A A A A A A A A A A A A A A A A A A A
048A 048B 048C 048C 049B 049B 049C 049C 049C 049C 059C 050C 050C 050C 050C 050B 052A 052B 052B 053B 053C	USSR USSR USSR USSR USSR USSR USSR USSR		
0480 0480 0480 0498 0498 0490 0490 0590 0500 052A 0530 0538 0538 0538 0538	USSR USSR USSR USSR USSR USSR USSR USSR		
048D 049E 049B 049C 049D 050C 050C 050D 052A 052B 053B 053B 053C 053B	USSR USSR USSR USSR USSR USSR USSR		
0498 0490 0490 0490 050C 0500 052A 052B 053B 053B	USSR USSR USSR USSR USSR USSR USSR USSR		HARRICE AND LOCAL
049C 049D 049E 050C 050D 052A 052B 053B 053B 053B	USSR USSR USSR USSR USSR USSR		
049E 050C 050B 052A 052B 053B 053B 053C C54A CDSMOS 1189	USSR USSR US US USSR USSR USSR		
0500 052A 052B 053C 053C 053C 053C 053C	USSR USSR USSR USSR		
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053C	USSR		┋╬
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1000 0540	4660		זט אחר פס
0040	USSR		
1980 054E 11889	USSR		JU 2
1980 055A PRUGRESS 18 1980 055B 11868	USSR	29 JUN	2 JUL 80
0578	USSR		┋╋
1980 0594 CBSMBS 1200 11884 12075	USSA	2 JOE	23 JUL 80
059B	USSR	JUL 6	JUL
0590	USSR	) JUL 6	an¥ Sec
1980 059E 11904	USSR	6 کاملا 2 عملا	28 JUL 80
0608	USSR	- 1	4
060C 1	USSR	14 JUL	15 JUL 80
060 fr	USSR		APR
1980 0618 1201 1895	USSR	15 JUL	18 JUL 80
1980 061C 11910 11911	0358	300 61	- 30C 90

DE SI GNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1980 LAUNCHES	S (CONT.)					
		11900	AIONI	18 JUL	١	
1980 0630		11898	WCCD.	111. 81	4 AUG 80	
	50 YUZ 37	11905	855A	- [	- 1	
		11906	USSR	Ť	3	
1980 0658		11908	USSR	24 JUL	29 JUL 80	
1980 065C		11920	USSR	24 JWL	23 406 80	
		11921	USSR		AUG	
1980 066A	COSMUS 1203	11915	USSR	31 JUL	14 AUG 80	
- 1	- 1	11916	USSR	- 1	9	
		11919	USSR		AUG	
		11927	1658	ı		
		11928	USSR	·	Y C	
1980 067A	CDSMDS 1204	11917	USSR	31 JUL	23 FEB 81	
	- 1	1918	8531	- 1	4	*f18-
		11960	USSR		130	•
1		11961	NSC8	1		
1980 067E		11987	USSR	31 JUL	31 UCT 80	
		11989	USSR	31 JUL	OCT	
1980 067H		11992	HSSH	-	- [	
		12010	USSR			
1980 0671		12014	ACCE	31.16	NOV A	
- 1		12015		- 1	- 1	
		12036	USSR		NO.	
		12037	8350		00 XON 01	
1980 0674		12038	USSK	31 JUL 21 HH	Ž Ž	
		12048	USSR		DEC	
- 1		12049	USSR	1	7	
		12052	USSR	31 30	17 NOV 80	
1980 067W		12056	USSR		Ş	
- 1		12057	USSR	21 JUL	POR	
		12074	USSR	-	DEC	
- 1	100	12075	MSSH	31 405	25 ALC 80	
1980 U56A	CUSMUS 1203	11924	033K	12 406	2	
		11943	USSR		SEP	
1980 070A	COSMUS 1207	11938	USSR	22 AUG	4 SEP 80	
- 1	- 1	11939	USSR	22 AUG	- 1	
		11954	USSR	22 AUG	SEP	
1980 0700	1	11965	33311	26 AUG	24 SED BO	
1980 U/18	CO2MUS 1208	C 16 1 1	K000	0	_	

DECAYED OBJECTS

1980 0826 1980 083A COSMOS 1215 1980 083A COSMOS 1215 1980 084A COSMOS 1216 1980 084A COSMOS 1216 1980 084A	082E 082E 082E 084B	082E 082E 083E 084B	082E 082E 083E 083E 084B	082E 082E 083B 083B 083B	0826 0826 0838 0838 0836 0836	082E 083B 083B	082E 083A 083B	0820 082E	082E					3189		1980 0818	- H		1900 0000	ľ		1980 079A PRUGREY	2 98			0776	1980 077A COSMOS		- 1	1980 076D	0768	0764	1980 0750		- 1	1980 072C		1980 LAUNCHES (CONT.	DESIGNATION	INTER-
						C 1316			CO 5MO 5 1215				S 1214	1							S 1213	F 2 7 1 1	٦		S 1212		S 1211					CBSMBS 1210		38			5 1209	7.	NAME	
, ,	12043	12041	12040	12021	12020	02021	95051	12017	12016	12031	12030	12029	12008	61021	12012	12005	13006	12024	12023	12022	11997	11994	11993	12006	11985	11983	11982	12001	11999	11996	11981	11980	11979	11977	11965	11976	11950	and the state of t	NUMBER	DECAYED OBJECTS
NCCO	CSSS	055R	USSR	W558	USSR	1555 0007	11000	COUR	833K	USSR	USSR	USSR	USSR	U55R	USSR	Q957	dooli Need	USSR	855R	USSR USSR	USSR	U55R	do Sti	USSR	USSR	USSR	USSR	USSK	USSR	USSR	USSR	USSR	CS CS CS	USSR	5n	USSR	USSR		SOURCE	
		- 1	16 OCT	1		ቁ	14 001	17 001	1	10 DCT	1	10 007	t	3		ł	5 061	3 OCT	•			1		26 SEP	ı	- 1		19 257	φ,		19 SEP	P		18 SEP	- 1	3 SEP			LAUNCH	
TO NAME OF	3 APR	- 1	5 DEC 80	4	OCT	<b>+</b> :	2 2 2	2	1	OCT	de	25 DCT 80	2			4	001		1	08 ADN 9	OCT	1	DEC	OCT	29 SEP 80	-	CT	# 5	- 1	OCT	21 SEP 80	967	SEP	26 SEP 80	956	- 1	17 SEP 80		DECAY	
																					d :																		NOTES	

MATIONAL		50 W 183				
DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1980 LAUNCHES (CONT.)						
1980 0850		12034	USSR	1		
- 1	1218	12029	USSR	- 1	4	
086B	•	12042	USSR	30 OCT	2 NOV 80	
1	***	12051	ACCO		Ş	
1980 0888		12051	ASSU ASSU	- 1		
_		12061	USSR		<b>N</b> 0	
- 1		12062	USSR	ł	ğ	
		12063	USSR	31 OCT	202	
		12064	RSSA	190 46		
		12055	USSR	NON +	21 NOV 82	
1980 089K		13327	USSR	AON +	JUL	
		12221	03311	NON	3	
		13337	USSR	AON +	00	
1980 08940		13347	USSR	AOK +	4	
089AR		13348	USSR	AON +		
	1221	12058	9991	NON CT	NOV NOV	
		12039	A5.00		900	
10000		12076	USSR		3 JAN 81	
		12083	USSR	12 NDV	98	
		12336	Sn	NON ST	HAY	
- 1		12067	**************************************	**************************************	12 050 80	
		12008	NSSO 1155B	10 NOV 27 NOV		
1980 094B		12079	USSR		-	
- 1		12080	USSR	27 NOV	4	
		12081	USSR	27 NOV	21 DEC 80	
0660	****	12082	3777	1 DEC	15 DEC 80	
1980 096A CUSMUS	1224	12084	USSB USSB	1 050	3	
ı		12095	SSR	1 DEC	HAY	
1		12096	9331	1 050	26 JAN 81	
	1227	12100	355n	16.060	3	
1980 1018		12101	USSR	16 DEC	20 DEC 80	
		12127	door	16 DEC	3 JAN 81	
		12120	455H	ł	9	
1980 1038		12118	USSR		NY	
		12119	USSR		*	
		12117	USSR	25 DEC	12 JAN 81	
1		12123	ISSR	26 DEC	DEC	
		12127	X330	- 1	APR	
1980 105A		12121	USSR			
- 1		12124	USSR	26 DEC		

9	THE	10	TAX	10	U33X	25521		1981 0278	1981
	APR	. 19	7 MAR	17	USSR	12382		9266	1861
- 1	1	ا پا		17	USSR	12300		30.70	1701
		<b>.</b>		17	100R	12340		0200	1901
1	1	\ }:	ı		0337	00621		3970	1961
81	A R	= 5	7 4 4 7	17	8334	13350		8920	198
	MAR	31		17	USSR	12341	COSMOS 1259	026A	1981
		=		14	89	12340		0258	1981
		1		1	USSR	12338	CHANGAN	0248	1981
	,		7		COOK	1333		0238	1981
2 9	- 1	1	- 1	1 2	9338	12335		#C20	1981
		19		Us	USSR	12552		0210	1861
		22			USSR	12550		8150	1981
			_	<b>J</b> 5	USSR	12318		8020	1981
	1					7,464	- C1CH10 - P62	7 7 %	1001
	- 1	20	2 FEB	28	SII	91561			1901
8	APR	13		19	USSR	12306		0160	1981
	- 1	3	975	19	USSR	12305		2514	1981
	I AR	13		19	USSR	12304		0168	1981
		<b>!</b> :		1	#558 0358	10621	CHAMPI SAP	4510	1861
D 9	E 0	11	659	10	HECO	12201			1961
		15	FEB	13	USSR	12314		014E	1981
		4		13		12313		1	1981
			FEB	13	USSR	12312		0140	1981
2		27		13	USSR	12299	CUSMUS 1245	014A	1981
		3			JAPAN	12296		9210	1981
		22			USSR	12163		9110	1981
	₫;	ļ.			U558	12162	INTERFORMOS 21	0 0 0	1991
1	FEB	•	933 C	2	855II	19161	C03M03 1243		
81	FEB	9		30	USSR	12158		0090	1981
	#	+		*	USSR	12157		8600	1981
	Z	27		24	USSR	12153		0078	1981
	\$	ا د د		25	H550	44.121	B0000000000	0000	1961
2	1	2	NAME OF THE PERSON OF THE PERS	20	115.50	13164	0451 5000503	005	1901
	JAN	20	LAN	16	USSR	12141		2048	1861
	4	28	1	-	U\$\$R	04121	COSMOS 1239	90	1981
81	Ž.	22		9,	CSSR	12136		0020	1981
₽ œ	F E B	10	Ž	•	USSR	12148		0016	1981
- 1	\$				USSR.	12147		\$	##
	N N	. 25		• •	USSR	12146		9100	1981
۱.	₹	5			USSR	12145		9616	
	ر م ا	12	LAZ Z	0	USSR	12132		691C	1981 1981
18	ر 2 ک	20		0	USSR	12130	CUSMOS 1237	001A	1981

INTER-NATIONAL DESIGNATION

NAME

CATALOG NUMBER

SOURCE

LAUNCH

DECAY

NOTES

DECATED DOJECTS

INTER-	-						
DE SIGNATION	ATION	NAME	NUMBER	SOURCE	LAUNCH	ОЕБАҮ	NOTES
981 L	1981 LAUNCHES	(CUNT.)					
1981 6	027E		12397	USSR	18 MAR		
1981 C	<del>0264 C</del> 0288	<del>c05M05-1260</del>	12365	USSR	20 MAR	l	
	0286		13180	USSR			
	028D		13181	USSR	20 MAR	10 SEP 82	
	028J		13186	USSR			
1961 1981	6288 0288		13193	USSR	20 MAR	l	
. I.	0285		13194	USSR			
	0281		13195	USSR	20 MAR	10 SEP 82	
1981 0 1981 0	028W		13198	USSR		OCT	
1			13199	US5R	20 MAR	16 NIL 82	
	0287		13200	A550		904	
1981 0	028AB		13203	USSR		S S	
1	028AC		13221	USSK	20 MAR	14 AUG 82	
1381	02840		13253	855A		4	
	028AF		13224	USSR		31 DEC 82	
1861	02846		13225	USSR	20 MAR	2 JUN 82	
- 1	02040		13228	USSR	20 MAR	<b>AD</b> *	
	028AM		13230	USSR	20 MAR	17 JUN 82	
0 1861	028A0		13233	USSR		DEC	
- 1	028AR		13234	USSR		25-AUG-02-	
	028AS		13235	USSK	ZU MAR	3	
1981 0		SOYUZ 39	12366	USSR	22 HAR		
1981	0298 0308		12369	USSR	l l	APR	
1	030C		12370	USSR	31 MAR	17 APR 81	
	0316		11621			- 1	
		COSMOS 1262	12385	USSR	7 APR	21 APR 81	
1961	0328		12387	USSR	7 APR		
- 1	0350		12410	USSR	t	1	
	032E		12411	USSR 11558	A APR	20 APR 81	
1981	034A S	STS 1	12399	Sn		14 APR 81	Đ.
Į.		CUSMUS 1264	12400	1558 8531	15 APR	23 APR 81	
1861	035B		12430	USSR	- 1	1	
	0350		12431	USSR	15 APR	8 JUN 81	
1	035£		12432	USSR	1		
1861	032F		0014				

INTER-	CATALOG				
NOIT	NAME NUMBER	SOURCE	LAUNCH	DECAY	NOTE
1981 LAUNCHES (CUNT.)					
-	12403	USSR	16 APR	19 APR 81	
1981 036D	12426	USSR	16 APR	- 1	
7	12428	USSR	•	HAR	
1981 037B	12429	USSR		YAH	
,,	12419	USSR		29 JUL 82	
3610 1961 3660 1961	12420	11000	- F		
ı	12474	HOOD	25 APR	26 MAK 61	
	12423	USSR		YA.	
1981 040C	12448	USSR	1	20 MAY 81	
- 1	12449	#88#	1	*	
1981 040E	12450	USSR		HAY	
	12452	USSR		¥.	
0428	12455	USSR	. 1	YAH A	
1981 0440	12944	Sn	15 MAY	8 DEC 81	
1981 045A COSMOS 1270	12461	ASSA		Ę	
1981 0456	12463	USSR	18 MAY	10 NAY 81	
Γ-	12466	USSR	21 MAY	NOF	
	12468	USSR		YAK	
	12499	USSR	•	NON	
1981 047G	12506	USSR	21 MAY	6 JUL 81	
-047H	12507	HSSN		E	
1981 048A COSMOS 1273	12469	USSR			
	12500	USSR		Š	
	12502	USSR		Š	
	12473	Sn	- 1	SEP	
	12491	AIDNI	- 1	18 NNF 8	
DE A COCKOC	12/05		- 1	<u></u>	
1981 0528 CU3NU3 1274	12495	1000	אַנוּ נ	3 JUL 81	
•	12579	USSR	NOF E	18 JUL 81	
1981 0530F	12762	USSR	A JUN	NOV.	
1981 GSAB	12914	NSSD	A JUN	29 OCT 81	
	*11				

DESIGNATION	NAME	NUMBER	אחמכ	LAUNCH	UGCAT	MOTES
1981 LAUNCHES	IES (CUNT.)					
1981 0540		12515	USSR	9 JUN	22 JUN 81	
<u>1981 0554</u> 1981 0558		12514	USSR	16 JUN	Š	
		12567	USSR	1	- 10 - 00 - 00 - 00 - 00 - 00 - 00 - 00	
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	1981 LAUNCHES (CONT.)	1981 067E	1		1981 0680	1		- 1	1981 0690		1	0700	1981 0706		· 1	1981 072C	1981 0768 1981 0768	<del>1981-078A - CBSMUS-1<b>296</b></del> 1981-078B	1	079B			1981 079E	079E 079E		079E 079F 080A COSMOS 1 080B 081B	079E 079F 080A 080B 080B 080B 080B 080B 080B 081C	079E 079F 080A 080B 081B 081B 081B 081B 081B 081B 081B	079E 079F 079F 080A COSMOS 1 080B 081E 081E 083A COSMOS 1 083B	079E 079F 080A CDSMD'S 1 080B 081E 083A COSMD'S 1 083B 083B 083C	079E 079F 079F 080A COSMOS 1 080B 081E 081E 083A COSMOS 1 083B 083B	079E 079F 080A COSMD'S 1 080A COSMD'S 1 080B 081C 081E 083A COSMBS 1 083B 083F 083F	079E 079F 079F 080A COSMD'S 1 080B 081E 081E 083B 081E 083B 081E 083B 083C 083B 083C 083B	079E 079F 079F 080A COSMD'S 1 080B 081E 083A COSMB'S 1 083B 083C 083B 083C 083B 083C 083B 083C 083B 083C 083B 083C 083B	079E 079F 079F 080A COSMD'S 1 080A COSMB'S 1 083A COSMB'S 1 083B 083A COSMB'S 1 083B 083A COSMB'S 1 083B 083A COSMB'S 1
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LAUNCHES (CONT.)  LOSAN	DE SI GNATION	NAME	NUMBER	SOURCE	LAUNCH	DĘCAY	NOTES
12840   USSR   1 SEP   SEP	ł	(CONT.					
CABLE         LEAST         USSN         11 SEP         5 OCT           CABLE         LEAST         USSN         11 SEP         10 CC           CABLE         LEAST         USSN         11 SEP         11 SEP         11 SEP         10 CC           CABLE         LEAST         USSN         11 SEP	1		12840	USSR	SEP	100	
CORNER   1282   USSR   11 SEP   JOH	1		12819	USSR	11 SEP	OCT	
0934         CUSKNIS 1306         12932         USSR         14 SEP         1 JEP         15 JEP           0934         1394         USSR         14 SEP         14 SEP         15 JEP	1		12820	USSR	1	3 JAN	
6950         USSR         14 SEP         15 DEC           0900         USSR         14 SEP         17 DEC           0900         USSR         14 SEP         10 DEC           0900         USSR         14 SEP         10 DEC           0900         USSR         14 SEP         10 DEC           0900         USSR         15 SEP         12 DEC           0900         USSR         15 SEP         13 DEC           0900         USSR         15 SEP         14 MO           0900         USSR		1	12822	USSR	1	1	
0890         13369         USSR         14 SEP         14 SEP         14 SEP         14 SEP         14 SEP         15 DEC           0890         13993         USSR         14 SEP         14 SEP         14 SEP         14 SEP         14 SEP         14 SEP         15 DEC           0894         1299         USSR         USSR         15 SEP         26 SEP         26 SEP         26 SEP         26 SEP         27 SEP			12029	USSR	L		
0897         11399         USSR         14 SEP         1 MIY           0894         1996         USSR         14 SEP         1 MIY           0894         1996         USSR         14 SEP         1 MIY           0996         1283         USSR         15 SEP         25 SEP           0996         1283         USSR         15 SEP         1 MIY           0997         1283         USSR         15 SEP         1 MIY           0996         1287         USSR         15 SEP         1 MIY           0997         1283         USSR         15 SEP         1 MIY           0996         1287         USSR         15 SEP         1 MIY           0997         1283         USSR         15 SEP         2 GEP           0996         1283         USSR         15 SEP         2 GEP           0997         1284         PRC         18 SEP         2 GEP           0998         1284         PRC         19 SEP         1 GEP           0999         1284         PRC         19 SEP         10 AR           0994         1284         PRC         19 SEP         10 AR           0994         1284         P			13369	USSR			
0930         USSR         14 55P         15 5F         25 5F			13393	USSR	_	MAY	
990K         COSMICS 1907         15893         U958         15 5EP         20 5EP           090K         12893         U958         15 5EP         10 5EP	- [		13408	USSR	L.	DEC	
990         12831         USSR         15 SEP         23 SEP           990         12873         USSR         15 SEP         4 JAN           990         12873         USSR         15 SEP         4 JAN           990         12873         USSR         15 SEP         4 JAN           990         12874         USSR         15 SEP         4 JAN           990         12873         USSR         15 SEP         23 GCT           990         12874         USSR         15 SEP         23 GCT           990         12873         USSR         15 SEP         23 GCT           991         PRC 98         12843         PRC         15 SEP         23 GCT           992         12873         PRC         15 SEP         24 SEP         25 GCT           993         PRC 98         12843         PRC         19 SEP         10 TAN           993         PRC 96         PRC         19 SEP         10 TAN           994         12843         PRC         19 SEP         10 TAN           995         12843         PRC         19 SEP         10 TAN           994         12844         PRC         19 SEP         10 TAN <td></td> <td>CB 54405 1307</td> <td>12830</td> <td>USSR</td> <td>- 1</td> <td>4</td> <td></td>		CB 54405 1307	12830	USSR	- 1	4	
0900         12873         USSR         15 SEP         4 JAN           0900         12875         USSR         15 SEP         4 JAN           0900         12876         USSR         15 SEP         7 SEP           0900         12878         USSR         15 SEP         23 GCT           0900         12838         USSR         15 SEP         23 GCT           0900         12838         USSR         15 SEP         23 GCT           0900         12838         USSR         18 SEP         23 GCT           0900         12840         PRC         19 SEP         10 GCT           0930         PRC 98         12840         PRC         19 SEP         10 GCT           0930         PRC 99         12840         PRC         19 SEP         17 AUG           0930         PRC 99         12840         PRC         19 SEP         17 AUG           0930         PRC 90         12840         PRC         19 SEP         17 AUG           0930         PRC 90         18 SEP         18 SEP         17 AUG           0930         PRC 90         18 SEP         18 SEP         18 AUG           0931         PRC 90         18 SEP<			12831	USSR		SEP	
090E         12875         USSR         15 SEP         30 SEP           090F         12876         USSR         15 SEP         25 DCI           090F         12878         USSR         15 SEP         23 DCI           090F         12837         USSR         15 SEP         23 DCI           090H         12838         USSR         18 SEP         21 DCI           091A         PRC 94         12847         PRC         19 SEP         20 SEP           093C         PRC 98         12847         PRC         19 SEP         20 SEP           093C         PRC 98         12847         PRC         19 SEP         20 SEP           093C         PRC 98         PRC 19 SEP         10 AR           093C         PRC 98         PRC 19 SEP         10 AR           093C         PRC 19 SEP         10 AR           093G         >1</td> <td></td> <td>12832</td> <td>USSR</td> <td></td> <td>AN</td> <td></td>	1		12832	USSR		AN	
12876         USSR         15 SEP         4 NUV           0905         12876         USSR         15 SEP         4 NUV           0906         12876         USSR         15 SEP         23 GCT           0906         12876         USSR         16 SEP         21 GCT           0936         PRC         94         PRC         19 SEP         21 GCT           0936         PRC         98         PRC         19 SEP         21 GCT           0936         PRC         98         PRC         19 SEP         21 GCT           0937         PRC         19 SEP         21 GCT         22 GEP         22 GEP           0938         PRC         19 SEP         10 AR         22 SEP         10 AR           0936         PRC         19 SEP         10 AR         22 SEP         10 AR           0936         PRC         19 SEP         10 AR         22 SEP         10 AR           0937         PRC         19 SEP         20 AR         22 SEP         20 AR           0938         PRC         19 SEP         20 AR         22 SEP         23 BEP         24 SEP         20 AR           0938         PRC         19 SEP         10 AR	- 1		12875	USSR	1		
C92A         CUSSN         15 SEP         23 OCT           C92A         CUSNUS 1309         12843         USSN         18 SEP         23 OCT           C92B         C05AUS         12843         USSN         18 SEP         23 OCT           C92B         PRC         98         12843         PRC         19 SEP         26 SEP           C93B         PRC         99         PRC         19 SEP         27 SEP           C93C         12843         PRC         19 SEP         27 SEP           C93C         12845         PRC         19 SEP         27 SEP           C93C         12845         PRC         19 SEP         17 AUG           C93A         12845         PRC         19 SEP         10 AUG           C93A         12845         PRC         19 SEP         10 AUG           C93A         12845         PRC         19			12876	USSR		Ī	
C92A         C05MUS 1309         12893         USSR         18 SEP         21 SEP           C92B         PRC 9B         12843         PRC         19 SEP         26 SEP           C93B         PRC 9B         12843         PRC         19 SEP         26 SEP           C93B         PRC 9C         12844         PRC         19 SEP         17 AUG           C93B         PRC 9C         12844         PRC         19 SEP         17 AUG           C93B         PRC 9C         19 SEP         17 AUG           C93B         PRC 19 SEP         17 AUG           C93B         PRC 19 SEP         10 AR           C94B         L28 SEP         10 AR           C97B	1		12878	USSR		3 001	
U925b         PRC         1550         26 SEP         27 SEP         27 SEP         27 SEP         27 SEP         27 SEP         27 SEP         28 SEP	i	CD SMUS 1309	12837	USSR	ł	SEP	
U93B         PRC         19 SEP         6 DGT           U93B         PRC         12843         PRC         19 SEP         12 MOV           U93B         PRC         12845         PRC         19 SEP         10 APR           U93B         PRC         19 SEP         10 APR         10			12842	PRE	- 1	45	
0930         PRC 9C         12845         PRC 19 SEP         17 AUG           0930         PRC 9C         12845         PRC 19 SEP         10 APR           0931         12847         PRC 19 SEP         25 NUV           0934         12885         PRC 19 SEP         20 NAV           0934         12885         PRC 19 SEP         20 NAV           0934         12859         PRC 19 SEP         20 NAV           0934         12859         PRC 19 SEP         20 NAV           0934         12872         USSR 29 SEP         17 SEP           0956         USSR 29 SEP         15 APR           0970         USSR 29 SEP         26 SEP           0970         USSR 28 SEP         26 SEP           0970         USSR 28 SEP         26 SEP           0971         USSR 28 SEP         26 SEP           0971         USSR 28 SEP         27 DEC           0972         USSR 28 SEP         27 DEC           0974         USSR 28 SEP         28 SEP         27 DEC           0976         USSR 28 SEP         28 SEP         28 DEC           0977         USSR 28 SEP         28 SEP         28 SEP         28 SEP           0977			12843	PRC	_ 1	120	
093E         12846         PRC         19 SEP         25 NUV           093F         12847         PRC         19 SEP         20 NAV           093F         12847         PRC         19 SEP         20 NAV           093G         12849         PRC         19 SEP         20 NAV           093A         12859         PRC         19 SEP         20 NAV           093K         12872         USSR         24 SEP         15 APR           094B         12872         USSR         28 SEP         15 APR           097B         12872         USSR         28 SEP         15 APR           097B         12872         USSR         28 SEP         16 FEB           097B         13055         USSR         28 SEP         26 FEB           097B         13668         USSR         28 SEP         5 DEC           097B         13669         USSR         28 SEP         15 DEC           097B         13669         USSR         28 SEP         16 DEC           097B         13724         USSR         28 SEP         17 DEC           097R         13724         USSR         28 SEP         17 DEC           097R         <	1	1	12845	PRC		AUG	
093F         1288I         PRC         19 SEP         22 MAY           093H         12885         PRC         19 SEP         20 MAY           093H         12885         PRC         19 SEP         20 MAY           093H         12895         PRC         19 SEP         16 NOV           093K         12872         USSR         24 SEP         16 NOV           097B         12872         USSR         28 SEP         16 FEB           097B         12872         USSR         28 SEP         16 FEB           097B         13055         USSR         28 SEP         26 FEB           097C         13055         USSR         28 SEP         26 FEB           097C         13055         USSR         28 SEP         16 DEC           097C         13668         USSR         28 SEP         16 DEC           097L         USSR         28 SEP         16 DEC           097K         USSR         28 SEP         28 SEP         28 SEP           097K         USSR         28 SEP         28 SEP         28 SEP         28 SEP           097K         USSR         28 SEP         17 DEC         28 SEP         17 DEC	- 1		12846	PRC	1 _	¥ 2	
093H         PRC         19 SEP         20 MAY           093H         12885         PRC         19 SEP         20 MAY           093H         12896         PRC         19 SEP         10 MAY           093K         12858         PRC         19 SEP         17 SEP           1956         12873         USSR         24 SEP         17 SEP           1956         12874         USSR         28 SEP         16 FEB           1997c         USSR         28 SEP         26 AUG           1997c         USSR         28 SEP         26 FEB           1997c         USSR         28 SEP         26 FEB           1997c         USSR         28 SEP         17 DEC           1997c			12847	7.X.	- 1	1	
0933         PRC         19 SEP         16 NOV           0938         12958         USSR         24 SEP         17 SEP           0956         12874         USSR         28 SEP         17 SEP           0956         12872         USSR         28 SEP         28 MUB           0976         12872         USSR         28 SEP         28 LFB           0976         13055         USSR         28 SEP         26 FEB           0977         13055         USSR         28 SEP         5 DEC           0976         13059         USSR         28 SEP         5 DEC           0977         13094         USSR         28 SEP         17 DEC           0978         13094         USSR         28 SEP         16 DEC           0974         13094         USSR         28 SEP         16 DEC           0974         USSR         28 SEP         16 DEC           0974         USSR         28 SEP         17 DEC           0974         USSR         28 SEP         17 DEC           0974         USSR         28 SEP         17 DEC           0977         USSR         28 SEP         17 DEC           097 <td< td=""><td>ı</td><td></td><td>12885</td><td>PRC</td><td></td><td>MAY</td><td></td></td<>	ı		12885	PRC		MAY	
USSR         29 SEP         17 SEP           U96B         USSR         24 SEP         15 APR           U974         USSR         28 SEP         15 APR           U974         USSR         28 SEP         16 FEB           U976         USSR         28 SEP         26 FEB           U976         USSR         28 SEP         26 FEB           U977         USSR         28 SEP         26 FEB           U978         USSR         28 SEP         5 DEC           U977         USSR         28 SEP         16 DEC           U978         USSR         28 SEP         16 DEC           U974         USSR         28 SEP         16 DEC           U974         USSR         28 SEP         24 DEC           U974         USSR         28 SEP         24 DEC           U974         USSR         28 SEP         17 DEC           U974         USSR         28 SEP         17 DEC           U974         USSR         28 SEP         17 DEC           U977         USSR         28 SEP         17 DEC           U978         USSR         28 SEP         17 DEC           U978         USSR         28 S	1		12958	PRC	ì	NOV	
U96B         U55R         C9 SEP         L2874         U55R         C9 SEP         L28 AUB           U97A         C05RUS 1311         L2872         U55R         28 SEP         16 FEB           U97C         U55R         28 SEP         27 FEB         16 FEB           U97C         U55R         28 SEP         26 FEB         26 FEB           U97C         U55R         28 SEP         5 DEC         5 DEC           U97C         U55R         28 SEP         5 DEC         5 DEC           U97C         U55R         28 SEP         17 DEC         27 DEC           U97L         U55R         28 SEP         16 DEC         29 DEC           U97K         U55R         28 SEP         24 DEC           U97K         U55R         28 SEP         17 DEC           U97K         U55R         28 SEP         17 DEC           U97K         U55R         28 SEP         17 DEC           U97K         U55R         28 SEP         17 DEC           U97K         U55R         28 SEP         17 DEC           U97K         U55R         28 SEP         17 DEC           U97K         U55R         28 SEP         17 DEC <t< td=""><td>ı</td><td></td><td>12853</td><td>USSR</td><td>1</td><td></td><td></td></t<>	ı		12853	USSR	1		
0974         CUSMUS 1311         12872         USSR         28 SEP         16 FEB           0976         USSR         28 SEP         27 FEB           0976         USSR         28 SEP         26 FEB           0976         USSR         28 SEP         26 FEB           0976         USSR         28 SEP         5 DEC           0976         USSR         28 SEP         17 DEC           0977         USSR         28 SEP         16 DEC           0978         USSR         28 SEP         16 DEC           0974         USSR         28 SEP         24 DEC           0974         USSR         28 SEP         24 DEC           0974         USSR         28 SEP         17 DEC           0974         USSR         28 SEP         17 DEC           0974         USSR         28 SEP         17 DEC           0974         USSR         28 SEP         17 DEC           0978         USSR         28 SEP         17 DEC     <			12874	202	- 1	4	
097C         13054         USSR         26 SEP         26 FEB           097D         USSR         28 SEP         26 FEB           097E         USSR         28 SEP         5 DEC           097E         USSR         28 SEP         5 DEC           097E         USSR         28 SEP         17 DEC           097E         USSR         28 SEP         16 DEC           097H         USSR         28 SEP         22 DEC           097K         USSR         28 SEP         24 DEC           097K         USSR         28 SEP         18 DEC           097K         USSR         28 SEP         17 DEC           097K         USSR         28 SEP         17 DEC           097K         USSR         28 SEP         17 DEC           097K         USSR         28 SEP         17 DEC           097K         USSR         28 SEP         17 DEC           097K         USSR         28 SEP         17 DEC           097K         USSR         28 SEP         17 DEC		CUSMUS 1911	12872	USSR		FEB	74
USSR         28 SEP         5 DEC           U97E         13668         USSR         28 SEP         5 DEC           U97F         13668         USSR         28 SEP         17 DEC           U97F         USSR         28 SEP         16 DEC           U97F         USSR         28 SEP         16 DEC           U97F         USSR         28 SEP         23 DEC           U97F         USSR         28 SEP         18 DEC           U97F         USSR         28 SEP         17 DEC           U97F         USSR         28 SEP         17 DEC           U97F         USSR         28 SEP         17 DEC           U97F         USSR         28 SEP         17 DEC			13055	155R	i .	FEB	Ď
USSR         28 SEP         5 DEC           0976         13694         USSR         28 SEP         17 DEC           0976         13695         USSR         28 SEP         17 DEC           0977         USSR         28 SEP         16 DEC           0978         USSR         28 SEP         24 DEC           0978         USSR         28 SEP         24 DEC           0978         USSR         28 SEP         18 DEC           0978         USSR         28 SEP         17 DEC           0979         USSR         28 SEP         17 DEC           0970         USSR         28 SEP         17 DEC           0970         USSR         28 SEP         17 DEC			13667	USSR		DEC	
0976         13694         USSR         28 SEP         16 DEC           0974         USSR         28 SEP         16 DEC           0974         USSR         28 SEP         28 SEP           097K         USSR         28 SEP         24 DEC           097K         USSR         28 SEP         18 DEC           097K         USSR         28 SEP         17 DEC           097W         USSR         28 SEP         17 DEC           097W         USSR         28 SEP         17 DEC           097P         USSR         28 SEP         17 DEC			13668	USSR		OEC OEC	
USSR         20 SEP         22 DEC           USSR         28 SEP         23 DEC           USSR         28 SEP         23 DEC           USSR         28 SEP         24 DEC           USSR         28 SEP         18 DEC           USSR         28 SEP         17 DEC           USSR         28 SEP         17 DEC           USSR         28 SEP         17 DEC           USSR         28 SEP         17 DEC	1		13695	USSR		DEC	
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C97L     13729     USSR     28 SEP     18 DEC       U97M     USSR     28 SEP     17 DEC       U97P     USSR     28 SEP     17 DEC       U97P     USSR     28 SEP     17 DEC       U97P     USSR     28 SEP     17 DEC			13724	USSR	- 1	O d	
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CANNCHES (CUNIT-1)   CONTROL   CANNCH   CONTROL   CANNCH   CONTROL   CANNCH   CONTROL   CANNCH   CONTROL   CANNCH   CONTROL   CANNCH   CONTROL   CANNCH		VOV		USSR	12937		98	_
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MANION NAME (APATRICA)  1977		NOV.		USSR	12935		36	•
MANTON NAME MAPRIER SDURCE LAUNCH DECAY NO  LAUNCHES (CUNT.)  13735  13744  13745  13744  137		*		USSR	12934		8	1
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CATALOG  GNATION  NAME  NUMBER  SDURCE  LAUNCHES (CJNT.)  13735  13744  USSR  28 SEP  31 DEC 82  13744  USSR  28 SEP  31 DEC 82  13821  USSR  28 SEP  31 DEC 82  13823  USSR  28 SEP  30 SEP	94	2	- 1	9221	12921		10	Ĭ
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UHAL OHATION NAME NUMBER SOURCE LAUNCH DBCAY NOTE  LAUNCHES (CINT.)  13735  13744  0977  13744  0977  13744  0977  13821  0977  13823  0977  0977  13823  0977  0977  0977  0977  13823  0977  0				0558	12013		705	7
UNAL UNAL GATALOG GNATION NAME NUMBER SOURCE LAUNCH DECAY NOTE  LAUNCHES (CUNT.)  13735  097R  13743  0971  13744  0971  13821  0977V  13821  0977X  0977Y  0977Y  0977Y  0977Y  0977A		OCT	1 007	CSSR	12910		96	
WHAL GNATION         CATALOG NUMBER         SDURCE         LAUNCH         DBCAY         NOTE           LAUNCHES (CUNT.)         13735         USSR         28 SEP         31 DEC 82         23 SEP         24		8	198	4884				- 4
WHAL         CATALOC         CATALOC           GNATION         NAME         NUMBER         SDURCE         LAUNCH         DBCAY         NOTE           LAUNCHES (CUNT.)         13735         USSR         28 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         29 SEP         29 SEP         29 FEB 83         29 SEP         29 FEB 83         29 SEP         28 FEB 83		OCT		USSR	12882		998	
WHAL GNATION         CATALOG NUMBER         SOURCE         LAUNCH         DBCAY         NOTE           LAUNCHES (CJNT.)         13735         USSR         28 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         31 DEC 82         29 SEP         28 FEB 83         28 SEP         28 FEB 83         28 SEP         28 FEB 83         28 SEP         28 FEB 83         28 SEP         28 FEB 83         28 SEP         28 FEB 83         <		<b>\$</b>	1	#SSB	12891	SM85 1313		- 1
HAL CHARLOS  GNATION NAME NUMBER SOURCE LAUNCH DBCAY NOTE  LAUNCHES (CUNT.)  13735  097R  097R  13744  0971  0977  13820  097V  097V  097V  13821  097X  097X  13823  097X  097X  13828  097A  097A  13831  097A		FEB		USSR	13832		7A8	1981 09
UNAL CATALOG GNATION NAME NUMBER SOURCE LAUNCH DECAY NOTE  LAUNCHES (CUNT.)  13735  097R  13743  0978  13744  0978  13821  0977  0977  13823  0977  0977  13823  0977  0977  13823  0977  0977  13826  0977  0977  13828  0977  0977  0977  13828  0977		<b>T</b>	1	USSR	13831		744	1981 05
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CATALOG GNATION NAME NUMBER SOURCE LAUNCH DECAY NOTE LAUNCHES (CONT.)  13735 USSR 28 SEP 31 DEC 82			1	USSR	13743		15	
GATALOG GNATION NAME NUMBER SOURCE LAUNCH DBCAY NOTE		DEC	SE	USSR	13735		)7R	-
ION NAME GATALOG SOURCE LAUNCH DBCAY NOTE						CUNT.)		1981 L
	NOTES	DBCAY	LAUNCH	SOURCE	NUMBER	NAME	NOTTA	ESIGNA
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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	ОĘСАУ	NOTES
1981 LAUNCHES	ES (CONT.)					
1981 1128		12955	USSR		NOV S	
1981 112C		12956	USSR	13 NOV	13 NOV 81	
1981 1120		12931	U55R	- 1	PEC.	
		12971	USSR			
Ι.		12972	USSR	NON ET	27 DEC 81	
1981 112H		12713	3550 3550	- 1	4	
١		12960	USSR		NO.	
- 1		12961	US5R	17 NOV	<b>₹</b>	
	COSMOS 1329	12989	USSR	4 DEC	DEC	
-		15990	4550 1050	<b>→</b> DEC	10 DEC 81	
		12991	N250	) OF C	3	
1981 1186		13005	USSR	♦ DEC		
		3006	USSR	1 9EC	22 DEC 01	
	CDSM0S 1330	13008	USSR		NAD	
		13009	USSR	1	₩:	
1981 1238		13013	USSR	23 DEC	16 JAN 82	
<u>-1982 LAUNCHES</u>	E-2					
1982 002A	COSMOS 1332	19031	USSR	1	al i	
1982 0028		13032	USSR	12 JAN	16 JAN 82	
1	C03M03 1334	15050	NCCO NCCO	NAL OS		
		15051	8557		NAD	
1982 003C		13039	USSR		20 JAN 82	
- i		13048	USSR			
		13049	USSR		6 FEB 82	
		00001	193K	NAL OC	6 FFB 82	
		15051	A550			
1982 0053		13040	, so		HAY	
- 1		13041	ns	- 21 JAN	245	
		13043	USSR			
- 1		13044	USSR		Į.	
		13140	N SSR		200	
		19141	033K	NAL CZ	17 AUG 82	
		13248	A5511		AUG.	
1982 0076		1324	USSR		AUG	
		13249	USSR	NAC 63		
		13250	USSR		בן בי	
- 1		13251	USSR	1	5	
		13252	USSR	29 JAN	24 JUL 82	
		13273	7550 8331		5 OCT 82	

LAUNCHES (COINT.)   13421   USSR 29 JAN 29 SEP	NATIONAL		6AFAL 06			
LAUNCHES (CONT.)  13421  13421  13432  13443  13444	DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY
Color   Colo	1982 LAUNCH					
0071 1342 0558 29 JAN 10 CT 82 0074 1405 1342 0558 29 JAN 10 CT 82 0074 1405 1342 0558 29 JAN 11 JUN 83 0074 1405 1342 0558 29 JAN 11 JUN 83 0074 1405 1342 1405 1405 1405 1405 1405 1405 1405 1405			13421	USSR		SEP
9074 1402 1402 1402 1402 1402 1402 1402 140			13429	USSR		•
OUT   OUT			14052	USSR		NO.
0072 14055 USSR 29 JAN 9			14054	USSR		NOC
ORTAL   1906   1907   1908			14056	USSR		Š
ORDER   1997   1998	- 1	1	13045	USSR		FEB
CONTROL   1303	- 1		13047	USSR		NA.
0100 COSMOS 1337 13001 USSR 11 FEB 25 ULW 82 1110 COSMOS 1338 13003 USSR 11 FEB 27 FEB 82 1448 82 1110 COSMOS 1338 13003 USSR 11 FEB 27 FEB 82 1448 82 1110 COSMOS 1338 13003 USSR 10 FEB 21 FEB 82 1448 82 1301 USSR 10 FEB 21 FEB 82 1448 82 1301 USSR 10 FEB 21 FEB 82 1448 82 1301 USSR 10 FEB 21 FEB 82 1448 82 1301 USSR 10 FEB 21 FEB 82 1448 82 1301 USSR 10 FEB 21 FEB 82 1448 82 1301 USSR 10 FEB 21 FEB 82 1448 82 1301 USSR 10 FEB 21 FEB 82 1448 82 1302 USSR 10 FEB 13 FEB 82 1448 82 1302 USSR 10 FEB 13 FEB 82 1448 82 1302 USSR 10 FEB 13 FEB 82 1448 82 1302 USSR 10 FEB 13 FEB 82 1448 82 1302 USSR 10 FEB 13 FEB 82 1448 82 1302 USSR 10 FEB 13 FEB 82 1448 82 1302 USSR 10 FEB 13 FEB 82 1448 82 1302 USSR 10 FEB 13 FEB 82 1448 82 1302 USSR 10 FEB 13 FEB 82 1448 82 1302 USSR 10 FEB 13 FEB 82 1448 82 1302 USSR 10 FEB 13 FEB 82 1448 82 1302 USSR 10 FEB 13 FEB 82 1448 82 1302 USSR 10 FEB 13 FEB 82 1448 82 1302 USSR 10 FEB 13 FEB 82 1302 USSR 10 FEB 13 FEB 82 1448 82 1302 USSR 10 FEB 13 FEB 82 1302 USSR 10 FEB 13 FEB 82 1448 82 1302 USSR 10 FEB 82 1448 82 1302 USSR 10 FEB 82 1448 82 1302 USSR 10 FEB 82 1448 82 1302 USSR 10 FEB 82 1448 82 1302 USSR 10 FEB 82 1448 82 1302 USSR 10 FEB 82 1448 82 1302 USSR 10 FEB 83 1448 82 1302 USSR 10 FEB 82 1448 82 1302 USSR 10 FEB 82 1448 82 1302 USSR 10 FEB 82 1448 82 1302 USSR 10 FEB 82 1448 82 1302 USSR 10 FEB 82 1448 82 1302 USSR 10 FEB 82 1448 82 1302 USSR 10 FEB 82 1448 82 1302 USSR 10 FEB 82 1448 82 1302 USSR 10 FEB 82 1448 82 1302 USSR 10 FEB 82 1448 82 1302 USSR 10 FEB 82 1448 82 1302 USSR 10 FEB 82 1448 8	- 1		13058	USSR	- 1	FEB
OTHER   13063   1306	- 1	_	13061	USSR		֓֞֝֞֜֞֝֓֞֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֡֓֓֓֓֓֓֡֓֓֡֓֡֓֡֡֡֓֓֡֓֡
13076   13077   13078   16 FEB   21 MAR 82   15 MAR 82   13077   13077   15 MAR 82   14 MAR 82   15	- 1		13063	USSR		MAR
1911   13078			13076	USSR	1	HAR
1316   13071   USSR   26 FEB   8 HAR   82   1306   13071   USSR   26 FEB   8 HAR   82   1306   13072   USSR   3 HAR   82   1308   USSR   3 HAR   27 HAR   82   1308   USSR   3 HAR   27 HAR   82   1308   USSR   3 HAR   27 HAR   82   1308   USSR   3 HAR   27 HAR   82   1308   USSR   3 HAR   27 HAR   82   1308   USSR   5 HAR   10 HAR   82   1308   USSR   5 HAR   27 HAR   82   1308   USSR   5 HAR   27 HAR   82   1308   USSR   15 HAR   27 HAR   82   1309   USSR   15 HAR   27 HAR   82   1309   USSR   15 HAR   16 HAR   82   1309   USSR   15 HAR   16 HAR   82   1309   USSR   15 HAR   16 HAR   82   1309   USSR   17 HAR   16 HAR   82   1309   USSR   17 HAR   17 HAR   82   1309   USSR   17 HAR   27 HAR   82   1309   USSR   17 HAR   27 HAR   82   1309   USSR   17 HAR   27 HAR   82   1309   USSR   17 HAR   27 HAR   82   1309   USSR   17 HAR   27 HAR   82   1309   USSR   17 HAR   27 HAR   82   1309   USSR   17 HAR   27 HAR   82   USSR   17 HAR   27 HAR   82   USSR   17 HAR   27 HAR   82   USSR   17 HAR   27 HAR   82   USSR   17 HAR   27 HAR   82   USSR   17 HAR   27 HAR   82   USSR   17 HAR   27 HAR   82   USSR   17 HAR   27 HAR   82   USSR   17 HAR   27 HAR   82   USSR   17 HAR   27 HAR   82   USSR   27 HAR   27 HAR   82   USSR   27 HAR	- 1		13078	USSR		APR
0168	- 1		13071	USSR		HAR
0178 0188 019805 1342 13007 USSR 5 MAR 6 MAY 82 13005 USSR 5 MAR 19 MAR 82 13005 USSR 5 MAR 19 MAR 82 13005 USSR 5 MAR 19 MAR 82 13005 USSR 5 MAR 19 MAR 82 13005 USSR 5 MAR 19 MAR 82 13005 USSR 5 MAR 19 MAR 82 13005 USSR 5 MAR 19 MAR 82 13005 USSR 19 MAR 10 MAR 82 13005 USSR 19 MAR 10 MAR 82 13005 USSR 19 MAR 10 MAR 82 13005 USSR 19 MAR 10 MAR 82 13005 USSR 19 MAR 10 MAR 82 13005 USSR 19 MAR 10 MAR 82 13005 USSR 19 MAR 10 MAR 82 13007 USSR 19 MAR 10 MAR 82 13007 USSR 19 MAR 11 MAR 82 13007 USSR 19 MAR 11 MAR 82 13007 USSR 19 MAR 11 MAR 82 13007 USSR 19 MAR 11 MAR 82 13007 USSR 19 MAR 11 MAR 82 13007 USSR 19 MAR 11 MAR 82 13007 USSR 19 MAR 11 MAR 82 13007 USSR 19 MAR 11 MAR 82 13007 USSR 19 MAR 11 MAR 82 13007 USSR 19 MAR 11 MAR 82 13007 USSR 19 MAR 11 MAR 82 13007 USSR 19 MAR 11 MAR 82 13007 USSR 19 MAR 11 MAR 82 13007 USSR 19 MAR 11 MAR 82 13007 USSR 19 MAR 11 MAR 82 13007 USSR 29 MAR 12 MAR 82 13007 USSR 21 MAR 82 13007 USSR 21 MAR 82 130			13081	USSR	i	HAI
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018D     13101     USSR     5 MAR     22 MAR       018E     13102     USSR     5 MAR     1 APR       020B     13093     USSR     15 MAR     16 MAR       020C     13094     USSR     15 MAR     16 MAR       020D     13095     USSR     15 MAR     16 MAR       020B     13099     USSR     17 MAR     18 MAR       021B     13097     USSR     17 MAR     31 MAR       021C     13115     USSR     17 MAR     21 MAR       021B     13116     USSR     17 MAR     1 APR       021B     13108     USSR     17 MAR     1 APR       021B     13108     USSR     17 MAR     1 APR       022A     515-3     13108     USSR     24 MAR     12 APR       023B     13123     USSR     24 MAR     12 APR       024B     COSMOS 1347     13123     USSR     24 MAR     12 APR       024B     COSMOS 1347     13125     USSR     27 APR     5 APR       024B     COSMOS 1347     13125     USSR     27 APR     5 APR       024B     COSMOS 1347     13125     USSR     27 APR     5 APR       025B     1300     13125	,	CUSAUS 1342	13085	USSR		A A
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LAUNCHES (CONT.)  036A COSMOS 1353 11  036C COSMOS 1355 11  038B COSMOS 1355 11  038B COSMOS 136B 11  038B COSMOS 136B 11  042B COSMOS 136B 11  044B COSMOS 136B 11	NUMBER SOURCE	LAUNCH DECAY NOTES
036A COSMOS 1353 11 036C COSMOS 1353 11 038C COSMOS 1355 11 038B COSMOS 1358 11 038B COSMOS 136B 11 038B COSMOS 136B 11 044B COSMOS 136B 11 044B COSMOS 136B 11 044B COSMOS 136B 11 044B COSMOS 136B 11 044B COSMOS 136B 11 044C COSMOS 136B 11		
036C 036C 036C 038b 038c 04c 04c 04c 04c 04c 04c 04c 04		9
0386 0386 0386 0386 0387 0387 0388 0388 03888	13147 USSR 13159 USSR	23 APR 10 MAY 82
0386 0386 0386 0387 0387 0388 0388 0388 03888		29 APR 7 HAR 84
0390 0390 0390 0380 0380 0380 0380 0380	13151 USSK	APR 29 AFR
038H 038K 038K 038K 038K 038K 038R 038R 038R 038R 038R 038R 038R 038R		APR 20
038K 038K 038K 038M 038M 038R 038R 038B 038B 038B 038B 038B 038B 038B 038B	14268 USSR	29 APR 31 AUG 83
038H 038K 038K 038M 038R 038R 038BA 038AB 038AB 038AB 038AB 038AB 038AB 038AB 038AB 038AB 038AB 038AB 038AB 038AB 038AB 038AB 038AB 038AB 048B 042B 043B 043B 044B 044B 044B 045B 044B 044B 045B 044B		APR 25
038K 038K 038H 038H 038R 038A 038AB 038AB 038AB 038AB 038AB 038AB 038AB 038AB 038AB 038AB 038AB 042B 042B 042B 042B 042B 042B 042B 043B 043B 044B 044B 045B 044C 044B 045B 045B 045B 045B 045B 045B 045B		29 APR 12 SEP 83
038H 038H 038H 038R 038R 038R 038R 038A 038AC 038AC 038AC 038AC 038AC 038AC 038AC 038AC 038AC 041B 041B 041B 041B 041B 041B 042B 043C 044B 044B 044B 044B 044C 044B 044C 044B 044C 044B 044C 044B 045C 044C 044C 044C 044C 044C 044C 044C		APR 12 SEP
038N 038N 038R 038R 038A 038AB 038AB 038AE 038AE 038AE 042B 043B 042B 043B 043B 043B 044B 044B 044B 044C 045B 043B 043B 043B 043B 043B 043B 044B 044	14279 14274 USSR	29 APR 26 SEP 83
038P 038R 038R 038AA 038AB 038AE 038AE 038AE 038AE 038AE 042B 043B 042B 043B 043B 044B 044B 044B 044B 044B 045B 045B 045		APR 27 AUG
038R 038R 038A 038A 038AC 038AE 038AE 038AE 038AE 041A 041A 041A 041B 043E 043E 044B 044C 044B 044B 045B 045B 045B 045B 045B		APR 22 AUG
03884 03884 03884 03884 03884 03884 03884 0418 0418 0428 0438 0438 0438 0438 0448 0448 0448 044		APR 26 NOV
038M 038AA 038AB 038AE 038AE 038AE 038AF 041A 042A 043B 043B 043B 043B 043B 044B 044B 044B		
038AA 038AB 038AE 038AE 038AE 038AF 042A SDYUZ T-5 043B 043B 043B 043B 043B 043B 044B 044B	14342 USSK	
038AB 038AC 038AE 038AF 038AF 041A 041A 042A SDYUZ T-5 043B 043B 043B 044B 044B 044B 044B 044B		APR 14 FEB
038AE 038AE 038AF 041A 042A 042B 043E 043E 043E 044B 044B 044B 044B 044C 044C 044C 044C		S FEB
038AE 038AF 041A 041A 042A 042B 043E 043E 043E 044B 044B 044C 044C 044C 044C 044C 044C		APR TEB
041A 041B 042A SDYUZ T-5 043B 043E 043E 044B 044B 044U 044U 044U 045C 045C 045C 045C 045C 045C 045C	14687 USSR	29 APR 5 FEB 84
0416 0428 0438 0438 0438 0438 0448 0448 0448 044		MAY 5 DEC
0450 0436 0436 0440 0440 0440 0440 0440 0450 0450 045	13171 US 13173 USSR	13 MAY 27 AUG 82
0438 043E 043E 0448 0448 0440 0440 045C 046A 046C 046C 046C 046C 046C		13 HAY 20 02
0448 0448 0448 0446 0446 0456 0456 0456 0466 0466 0466	13592 13583	27 3Er
0448 0448 0440 0440 0456 0456 0456 0468 0466 0466 0466		16
0446 0446 0446 0456 0456 0464 CDSMDS 1368 1 0466 0456	13178 USSR	18 MAY
0440 0446 0458 0466 0460 0460 0460 0466		14 CE 033 VI CO 03
0458 0456 046A COSMOS 1368 0466 046C 0456 0456	13217 USSR	14 55
045C 046A COSMOS 1368 0468 046C 1046C 1046E		MAY 17 JUN
0468 0450 0460 0460 0460 0460 0460 0460 0460	13207 USSR	21 MAY 3 JUN 82
0450 0450 0450 045E		HAY 29 HAY
0450 046E 0474 PRDERFSS 13	13254 USSR	21 MAY 6 JUN 82
0474 PROGRESS 13		MAY 9 JUN
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1982 0478	13211 USSK	

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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY
1982   AIINCHES	ES (CINT.)				
				- 1	
	COSMOS 1369	13213	USSR	25 HAY	30 MAX 92
1982 048C		13216	USSR		
1982 0488		13268	USSR	25 MAY	J C
l l	COSMOS 1370	13219	USSR	- 1	F
		13220	USSR		31 MAY 82
1982 0506		13239	USSR	28 MAY	NOF
		13240		- 1	1
		13411	USSR	1 JUN	9 SEP 82
1982 0526	CDSMDS 1373	13244	USSR	2 JUN	N N
		13245	USSA	2 JUN	18 JUL 82
		13277	HSSP.		2
1982 053E		13278	USSR		1
1982 0536 1982 054A	COSMUS 1374	13257	USSR	3 JUN	
		1 3280 1 3280	USSR	NOF E	3 JUN 82
1982 0564	COSMIC 1376	13263	HSSR	B JUN	- 1
		13264	USSR	8 JUN	ے او
1982 056D		13289	USSR		1
1982 0566 1982 057A	COSMOS 1377	13265	USSR		
	- 1	13266	USSR	NO. 81	ر ا ا
1982 060A	CUSMUS 1517	13284	HSSN.	1	L
1	COSMOS 1380	13282	USSR	NOF BT	27 JUN 82
1982 0628	COSMOS 1381	13283	USSR		1 JUL 82
		13305	USSR	NOF 81	AUG
1982 0620		13306	USSR	- 1	SEP
		13307	USSR	NOT BT	13 JUL 82
1982 002F	50YUZ T-6	13292	USSR		ڳ
		13293	11888	NOF 52	7 AUG 82
		13297	USSR	1	1
1982 065A		13300	US	27 JUN	♦ JUL 82
	COSMOS 1384	13304	USSR		שור
1982 0678		13345	USSR	ı	4
1982 0688		13346	USSR	6 JUL 9	8 JUL 82
- 1		13370	855II	6 JUL 6	AUG

DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DĘCAY	NOTES
1982 LAUNCHES	IES (CONT.)				The state of the s	
1		13373	USSR		AUG	
1982 0686 1982 070A	PRUGRESS 14	13361	USSR		AUG	
1982 0708 1982 071A	COSMOS 1387	13365	USSR USSR		Ι	
1982 0718 1982 071C		13388	USSR		# = =	
1982 0710— 1982 0728		13368	USSR US	15 JUL 16 JUL	12 JUL 84	
1.		19384	USSR	21 JUL	3 SEP 82	
- 1	COSMOS 1396	13391	USSR	1	1 AUG 82	
	COSMUS 1397	13394	USSR USSR	1	#AY	8¥
1982 0768		13395	USSR USSR	29 JUL 29 JUL	22 APR 83	
1		13982	USSR IIXSR	29 dUL 29 JUL	13 APR 83	
		19661	US5R		4	
1982 0766		13989	USSR	15 62 20 88	4	
		14018	USSR		APR	
1982 076R 1982 076S		14020	USSR	į .		
1982 076U		14022	USSR	29 JUL 29 JUL	27 APR 83	
		14025	USSR	29 JUL 62	24 APR 83	
- 1		56041	USSR	•	A C	
1982 077A	CUSMUS 1398	13396	3550 9558	1	3	
		1140	USSR	3 AUG	1	
1982 0770 1982 078A	COSMOS 1399	13399	USSR	POX C	-	
1982 0788		13400	USSR	A AUG	1	
1.	\$8702 1-7	13425	US9R	19 AUG	10 0E6 0E	
1982 0808	1071 30000	13450	A558	- 1	- 1	
1982 0818	TOLY COMED	13428	USSR		AUG	
1982 0816 1982 0810		13495	USSR		SEP	
1982 0828		13438	USSR US	Γ -	1 .	
		13447	50	26 AUG	1.2 CED 82	
1982 0838		13433	USSK 4558	27 AUG		
1982 0830 1982 0830		13437	USSR		SEP	

1982 088AB 1982 088X 1982 088Z 1982 0866 1982 086H 1982 086D 1982 0868 1982 0860 1982 085E 1982 088N DESIGNATION 1982 068AH 1982 088AF 1982 088V 1982 0886 1982 LAUNCHES 1982 OBBAD 1982 088U 1982 088R 1982 0884 1982 088J 1982 0881 1982 0886 1982 088M 1982 088F 1982 0886 1982 0880 1982 088A 1982 086F 1982 0864 1982 0856 1982 085C INTER-1982 088K 1982 088H 1982 0888 1982 6856 1982 085A COSMUS 1405 COSMOS 1404 COSMOS (CONT.) 1403 <del>DECAYED OBJECTS</del> CATALBO 14651 14649 14641 14637 14638 14639 14645 14643 #42 14636 14602 14603 14604 14605 13550 13508 NUMBER 14648 114 14601 14509 13548 <del>13549</del> 13454 14653 14647 14606 14600 135 13451 13551 13543 13509 13453 13449 13450 USSR USSR USSR USSR USSR USSR USSR USSR USSR USSR USSR USSR SOURCE LAUNCH THE PROPERTY OF THE PROPERTY O SEP Gass SEP SEP SEP SEP 3 SEP 82 3 SEP 82 17 OCT 82 17 OCT 82 30 OCT 82 30 OCT 82 5 FEB 82 5 SEP 82 5 SEP 82 12 JAN 84 1 JAN 84 1 JAN 84 1 JAN 84 1 JAN 84 31 DEC 83 5 JAN 84 10 JAN 84 30 OCT 82
14 OCT 82
26 OCT 82
15 SEP 82
10 SEP 82 28 JAN 84 31 JAN 84 4 JAN 84 6 JAN 84 4 JAN 84 1 JAN 84 1 JAN 84 9 JAN 84 DECAY NOTES VTIJAUQ 9009 40

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DE SIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1982 LAUNCHES	ES (CONT.)					
1982 089A	C05M05 1406	13519	USSR	8 SEP	SEP	
1982 0890 1982 0890		13520	USSR			
- 1		13582	USSR	1	# 5	
	PRC 12	13521	PRC	9 SEP	21 SEP 82	
1982 0900 1982 0900		13557	PRC		_	
1	CB 5M05 1407	13546	U55R	15 550	19 CED 82	
		1354/	USSK	- 1		
1982 693C		13556	USSR		SEP	
		13583	USSR		<b>1</b>	
		13584	USSR	16 SEP	14 SEP 83	
	PRUGRESS 15	13550	45.50 45.511		SEP	
		13537	WC50	- 1	1	
1982 095C		13587	USSR		OCT.	
- 1	COSMUS 1411	13597	USSR	ſ	130	
		13598	USSE		6 OCT 82	
		13613	USSR	30 SEP	00.1	
1962 0960		13616	USSR	- }	130	
		13645	USSR		200	
1		13646	USSR 11559	2 001	14 NOV 92	
		13047	033K	- 1	į	
1982 1006 1982 1006		13605	USSR			
		1361	USSR	- 1	100	
		13612	USSR		120	
1		13633	USSK	14 001	8 NOV 82	
		13034	3550	- 1	#	
1982 103C		13626	USSE			
1		13629	USSR	20 OCT	MAY	
1982 1035	COSMOS 1418	13627	USSR		1	
		13628	USSR		HAR	
1		13684	93	30 05	14 SFP 83	
		13037	6551	ı		
1982 1078 1982 1078	FRUGKESS 10	13640	USSR		_	
- 1	- COSMIS 1419	13641	USSR	1	1	
		13642	USSR	2 NOV	6 NOV 82	
1982 1980		13655	USSR		Š	
1962 1060		13656	USSR	YON 2	1	
		13657	USSR		>0 2	ě
- 1	515 5	13650	9	NON TI	16 NOV 82	Þ

1982 1198 1982 1198 1982 1196 1982 1190 1982 1154 1982 115J 1982 115K 1982 115K 1982 119F 1982 1196 1982 120A 1983 0058 1983 005E 1983 005F 1982 1298 1982 1200 1982 1150 1982 1150 1982 1126 1982 112E DESIGNATION NATIONAL 1903 0050 1983 LAUNCHES 1982 1196 1982 1140 1982 114A 1982 INTER-1582 114 1982 114E 1982 1138 1982 1126 1982 LAUNCHES (CONT.) 1982 1158 1982 1148 1982 1146 1982 1136 1982 1136 1982 1120 **1983 UUSC** 1983 005A 1982 1178 1982 1156 1130 CUSMUS COSMOS COSMOS 1424 COSMOS COSMOS 1421 COSMOS 1426 COSMUS 1425 1439 1438 1422 NAME DECAYED - DBJECTS NUMBER 13701 13701 13702 13703 13725 13725 13739 13740 13741 13676 13676 13677 13677 13678 13679 13727 13727 13727 13749 13754 13755 13756 13745 13698 13786 13787 13788 13788 13786 13784 13686 <del>13692</del> 13693 13665 13672 13673 13873 13670 13661 USSR USSR USSR USSR USSR USSR #SSA SOURCE 28 DEC 28 DEC 27 JAN 27 JAN 27 JAN 27 JAN 27 JAN 27 JAN 23 DEC 23 DEC 23 DEC 16 DEC LAUNCH 26 NOV 18 NOV 18 NOV 28 DEC 26 NOV 7 8 8 8 DEC 8 DEC 8 DEC 3 DEC 3 DEC # **\*** AON 81 6 8 050 9 95 8 DEC **63**3 6 JAN 83 6 JAN 83 28 DEC 82 28 DEC 82 9 066 82 22 0EC 82 21 0EC 82 21 0EC 82 23 0EC 82 12 0EC 82 15 0EC 82 15 0EC 82 19 0EC 82 7 FEB 83
12 FEB 83
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22 FEB 83 18 BEC 82 27 DEC 82 17 DEC 82 2 DEC 82 22 NOV 82 20 NOV 82 ↑ DEC 82 5 MAR 83 20 DEC 82 28 NOV 82 27 NOV 82 5 DEC 82 6 DEC 82 14 DEC 82 12 OCT 83 3 MAR 83 DECAY NOTES YTIJAUQ ROOM 10

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NATIONAL DESIGNATION	NAME	CATALOG NUMBER	SOURCE	LAUNCH	DECAY	NOTES
1983 LAUNCHES	S (CONT.)					
1		13843	USSR		22 FEB 83	
1983 009A	COSMOS 1440	13794	USSR		FE8	
- 1		13847	USSR	10 FEB	A S	
		13848	USSK			
1983 012A	COSMOS 1442	13850	USSR	_ [	11 APR 83	
1963 0128	COSMUS 1663	13868	USSR	2 MAR		
	١.	13869	USSR	2 HAR	1	
		13872	USSR	2 MAR	4 MAR 83	
1983 0130	COSMOS 1444	13870	USSR	2 MAR	MAR	
	١,	1367	USSR	1	1	
		13891	USSR	2 MAR	16 MAR 83	
1983 0140		13893	USSR		HAY	
- 1		13894	USSR		ł.	
		13876	USSR	11 MAR	27 MAK 83	
1983 0156 1983 0150		13881	USSR			
		13079	U55R	ı	13 MAR 03	
		13880	USSR	12 MAK	A A	
1983 0174	COSMUS 1445	13888	USSR		HAR	
		13889	USSR	ł	AN MAR BY	
	COSMOS 1446	13886	USSK	10 HAR	¥ 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
1983 0188		13951	USSR			
- 1		13952	USSR	16 MAR	31 MAR 83	
		13755	A550		4	
1983 019C		13896	USSR		31 HAR 83	
1		13902	USSR	23 MAR	N N N	
1983 0206		13903	USSR	Į.	5-AUG	
	CDSMOS 1449	13955	USSR	31 HAR	15 APR 83	
		13950	USSR		APR	
1983 0240		13963	USSR	- 1	APR.	
1983 024E		13993	USSR	31 MAR	23 APR 83	
		13994	15 CB	31 MAR	A A	
		13997	355H	ı	- 1	
1983 024.1		13997	USSR	31 MAR		
- 1		13965	USSR	7 MPK	CO IMP I	
		13966	USSR	ļ	APR O	18
1	515 6	00/61	500	N A DR	APR	

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	17 400 00					
	5		USSR	14247		-
	27 MAY 83	O HAY	COUR	14083		1983 043J
	4	- 1	X	1,000		- 1
	APR		USSR	14079		
	ŧ	* ***	USSR	14078		
		-	USSR	14063		
	6 HAY 83	0 TA	COUR	14062		1687 (1436
		- 1	25.50	14060		- 1
		6 HAY	USSR	14058	COSMOS 1460	043A
		28 498	USSR	14067		1
	YAK		USSR	14066		
	19 MAN 93	28 APR	UN COUR	14045		1983 0408
		- ł	1558	14045	605M05 1458	
		26 APR	CSSR	14040		0398
	E	- 1	USSR	14039	COSMOS 1457	4669
			USSR	14043		
	A MAX 83	25 APA	COUX	14042		1983 0385
		_ }	83311	14038		ŀ
		_	USSR	14036		
	<b>*</b>	1	## USSR	14030		1983 0366
,	APR	_	USSR	14028		0368
LIT	SO TAY BE	22 APR	United States	1402	GOSMOS 1454	1983 036A 684
Υı	*	20 404	45.5H	14035		
ებ	PR	_	USSR	14014	8-1 ZUYUZ	, 035A
) }	*	1		<u>15377</u>		1983 6342
80	ב ב		USSR	1537(		
00	2 NOV 84	19 APR	USSR	15007		1983 U34N
		19 498	HSSR	14854		1983 034K
40	MAY	_	USSR	14853	;	
ı	10 100 04	19 APR	COUX	14731		9460 6861
		ı	8588	86541		- 1
			USSR	14597		
	<b>1</b> 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	ı	#SSB	14578		i .
	25 MAD 84	10 ADD	95511	14577		JVEU E861
			COS	16367		
	*	- 1	W 25 5 K	1307		ĺ
	APR	_	USSR	14026		
	**	8 100	HESU	14016		1
	A D R		ASSE	13978	100	0298
	15 MAY 84	8 APR	USSR	13979	CDCMOC TART	1983 G28D
					(CONT.)	1983 LAUNCHES (C
NOTES	DECAY	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION
				6434166		24

DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
983 LAUNCHES	(CONT.)					
1983 044C		15601	USSR	7 MAY	23 MAR 85	
		15602	155R	7 MAY		
044F	\$771 JONG 63	15801	US5R	17 MAY	NA N	
1983 0458	cosmos 1192	14072	USSR	17 MAY	MAY	
- 1		14074	USSR			
		8604			\$	
		14099	USSR		20 JUN 83	
4640	COSMUS 1465	14087	US5R	26 448	NYI	
1983 0498		14088	USSK			
1		14092	USSR		1	
		2604	USSR		*	
1983 (445		14094	USSR		DEC	
- 1		14212	USSR		CO 400 3	
		14213	USSR	26 MAY	ı	
7640	1	51241	ACCO		, J	
050A	COSMUS 1466	14089	3550		¥	
		14097	USSR			
CSUC	CD 540 5 1463	14100	U55R	1	¥5	
1983 052B		14101	USSR		10 JUN 83	
- 1		14102	10.5B	YAM 16		
		14103	350 350	- 1	1	
1983 0525		14118	USSR		SEP	
1983 0325		14119	USSR		•	
		14120	USSR	31 MAY	50 NUC 17	
1		14121	USSR			
		70.14	US9R	NOD T	\$	
1983 053C		14108	USSR	NOS C	8 JUN 83	
- 1		14109	USSR 1	NOC -	SA NIII 14	
	COSMOS 1468	14110	USSK	NOC -		
		14111	USSR	NOC 2	1	
_		14141	U55R	1	\$	
1983 0574	9941 SUMSUS	14123	USSR	NOC %	24 JUN 63	
- 1	- 1	14124	USSR	NOC 41		
		14126	U338	- 1	NA.	
1		14149	USSR			
		14150	USSR			414
1983 091F	7 515	14132	Sn	18 JUN	24 JUN 83	***
	SPAS-01	14142	7 KG			•
1983 0608	,	14138	858	NOS 23	Ф	
1983 UGZA	-1-7nx0s	14152	USSR		N O O	

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NATIONAL DESIGNATION	BMAN	CATAL OC NUMBER	SOURCE	LAUNCH	DECAY
1983 LAUNCHES	(CONT.)	NOMOLE	SCCACE	LAUNCE	ממנאו
1983 064A	COSMOS 1471	14156	USSR	28 JUN	28 JUL
1983 0648		14232	USSR	28 JUN 85	28 JUL 83
- 1		14233	USSR	- 1	<b>*</b>
1983 0668		14161	USSB	NOT 87	58 90V 11
		14162	USSR		
		14165	USSR	ז טער	25 JUL 83
- 1	COSMUS 1472	14169	USSR	- 1	- 1
1983 068B		14170	USSR	5 JUL	
		14198	USSR	2 JUL 5	SEP
1983 068F		14203	1888	5 44	28 AUG 83
		14183	USSR	1	\$
1983 070C	CDCMDC 1483	14184	USSR	_	<u>ا</u> ک
	COSIDS TICE	14186	USSR	. ]	JOL 6
1983 0710		1 <b>41</b> 88	8551	13	68 Jan 6
		14217	USSR	1	560
		14218	USSR	-	
		14230	USSR	13 JUL	
1983 0738		14200	USSR	19 JUL	20 AUG 83
1983 074A	COSMOS 1483	14204	USSR	20 JUL	3 AUG 83
		14205	HSSR.		\$
1983 6748		1424	USB	30 JUL	11 AUC 83
i	COCMOC 1685	14243	USSR	_	AUG
	003103 1103	14211	USSR		A C
1983 0760		14253	USSR	26 JUL	29 SEP 83
		14254	USSR	•	<b>k</b>
		14255	USSR		AUG DUA
1983 080A	COSMOS 1487	14245	USSR	5 AUG	19 AUG 83
	- 1	14246	USSR	1	<b>₹</b> 06
		14249	USSR	•	<b>A</b>
1983 080E		14292	USSR	5 AUG	11 SEP 83
		14295	USSR	I	¥6.
		14250	JAPAN		SEP
- 1	CUSMUS 1488	1425	055k	- 1	<u> </u>
1983 0828		14252	USSR	9 AUG	18 AUG

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LAUNCHES 382D 982E	NAME	NUMBER	SOURCE	LAUNCH	OFCAY	NOTES
	NT.)					
1		14302	USSR	9 AUG		
1983 082F		14303	USSR	9 AUG	13 NOV 83	
083A	COSMOS 1489	14256	USSR	H	SEP	
		14257	USSR	10 AUG	14 AUG 83	
1983 0830		14371	USSR			
		14261	US5R	904 07	12 415 62	
084E		14262	USSK	10 AUG	2 d	
1983 0858 FRUS	NE33 IT	14284	USSR		AUG	
- 1	13	14288	PRE	19 AUG	3 SEP 83	
		14289	PRC	. 1	3	
1983 086D		14293	PRC		. –	
1983 386E		14294	PRC		99	
086F		14296	P&C	19 AUG	20 AUG 83	
1983 0878 CUSH	COSMUS 1493	14300	USSR		AUG	
1983 087C		14304	USSR	1	9	
		14322	USSR	23 AUG	18 SEP 83	
1983 087F	Ē	14324	USSR		00.	
- 1		14308	USSR	1		
		14309	USSR	25 AUG	20 AUG 83	***
1983 0908	D	14314	USSR	_	SEP	5
3060		14315	USSR	90 × 96	24 SEP 83	
	105 1494	14316	USSK 1550	31 AUG		
	10S 1495	14320	USSR		16 SEP 83	
1983 0928		14321	USSR	3 SEP		
		14338	USSR	1	415	
	105 1496	14326	USSR	7 SEP	19 0C1 83	
1983 0938		14321	ACCO SU	8 SEP	MAY	
	1493	200	USSR	- 1	945	
095B		14331	USSR		SEP	
- 1		14367	USSR	9 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	A OCT BA	
		14368	U33K 11558	- 1		
1983 095F	;	14562	USSR	_	OEC	
096A	COSNOS 1498	14335	USSR	14 SEP	19 SEP 83	
ŀ		14.336	USSR	ł	SEP	
1983 0960		14374	USSR			
1960		14376	USSR	100	١.	
1983 097A COSMOS	4DS 1499	14339	USSR	17 SEP	1 001 83	

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LION	NAME NUMBER	SOURCE	LAUNCH	DBCAY	NOTES
1983 LAUNCHES (CONT.)					
1	14341	USSR	1	19 SEP 83	
- 1	14383	USSR	17 SEP	9 OCT 8	
1983 0976	14384	USSR			
	14391	NSSA.	# 5	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
1983 098B	14366	US			
	14379	USSR		SEP	
l	14733	USSR	30 SEP	28 APR 84	
1983 101F	14963	USSR		9 SEP 84	
1983 1016 1983 1016	15110	USSR		1 HAR 85	
	15375	USSR		28 JUL 95	Ю
1983 102A CDSMOS 1502	14395	USSR	1	1	d:
	14403	USSR	14 007	6 DEC 83	300
١.	14422	USSR	20 OCT	N	ō i
L	14488	USSR		N N	1 <b>V</b> C
	14425	USSR		VO.	YTI.
l	14481	USSR	21 001		
	14560	USSR		1 FEB 84	
i .	14456	USSR	29 OCT		
1128	14498	USSR	:		
	14536	USSR		030	
	14540	USSR	17 NOV	7 DEC 83	
1983 114B	14517	USSR	23 NOV	ាវ	
1983 114C	14518		- 1	3	•
1174 60SM	14530	us su	40N OE	13 JAN 84	911
1983 1176	14531	USSR		DEC.	
1180	14534	USSR	30 NOV	1 06	
	14543	USSR	7 056		

	36 400 04	I MAD	93311	11000		
			USSR	14823		
		•	USSR	14822		i .
		10 MAR	USSR	14798		0268
	<b>A</b>	1	#25 <del>0</del>	16797	COSMOS 1543	
		7 MAR	USSR	14856		1984 0256
	ŧ.	7 X A	TINNO COURT	14051		
	Z (	7 MAR	93311	1/051		- 1
		7 MAD	1000	14047		
	YAN	7 MAD	11550	14847		- 1
	21 MAR 89	7 MAR	CSSR	14793	COSMOS 1542	025A
		- 1	NS SU	34792		1984 0246
	APR	6 HAR	USSR	14791		_
	1	4	NSSR	14785		
			USSR	14784		
	ADR B	28 558	LISSE	14901		1984 0206
			85511	16.766	605M05 1599	0208
<u>ا</u>	100		LICEP	## NO		CTGG
TI			9331	16750	PRUGRESS 19	2103
J ZE	P MAR 84	16 FEB	CSSR	14779		017H
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δí	IAR	16 FEB	USSR	14777		-
5	- 1	16 758		4776		ı
40			USSR	14775		
O.	**************************************		USSR	14774		1984 0176
4		16 558	85511	16738	603003 1331	0170
<u> </u>			LICER	14727	0.500	0100
0	223		85511	16727		- 1
	17 55 64		COUR	14726		_
	- 1	8 550	93311	14917		- 1
	X		- C	16915		_
		- 1	W5-50	2010		-
	PR	8 FEB	USSR	14701	S0YUZ T-10	0144
	8			14969		1984 012#
	OCT		US	14964		•
	ę.	\$ FEB		14761		ı
			US	15557		1984 011X
	24 400 95		10	15666		1110 4861
		ı	311	16773		- 1
			5 0	1/77		
		- 1	3	167.6		ı
			. CS	14769		-
	1	-1		14768		1984 011N
	ΕE	3 FEB	SO	14767		_
		•	8	14766		l
	28 FEB 84		Sn	14765		1984 011K
					(CONT.)	1984 LAUNCHES
NOTE	DECAY	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION

DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	орсах	NOTES
1984 LAUNCHES	S (CONT.)					
١.		14827	USSR	16 MAR	20 APR 84	
1964 C308	CUSMUS 1545	14850	USSR	21 MAR	29 MAR 84	
- 1		14855	USSR	- 1	MAR	
		14889	USSR			
		14891	USSR	1	MAY	
		7,489	USSR		4	
1984 U30H		14893	USSK	21 MAK	S APK 84	
		14896	USSR		APR	
ŧ		14869	USSR	•	44	
1984 031C	FOW13 T 11	14869	USSR	29 MAR	29 MAR 84	
1984 032F	11_1_70106	14873	USSK	3 APR	5 APR 84	
		15346	USSR	- 1	4	
		14885	USSR	4 APR	14 MAY 84	
1984 033C		14886	USSR	APA 4	13 400 04	97.4
1964 US4A	515 41C	14897	65		X X X	
		14903	USSR		APR	
1		16641	U558	ł	**	
1984 0360	00 33 303000	14992	USSK	IO APK	25 MAY 84	
	27 55 7004	14933	USSR		17 APR 84	
1984 039A		14935	SA	17 APR	49 AUG 84	
	COSMOS 1549	14938	USSR	22 APR		
1984 040C		14952	USSR	!		
- 1		14954	USSR		NAP.	
		14955	USSR	22 APR	7 MAY 84	
1984 0418		14941	USSR	22 APR	24 APR 84	
- 1		14942	USSR	22 APR	A PR	
	PROGRESS 21	14961	USSR	7 HAY	26 MAY 84	
1984 0428	COSMOS 1551	79641	USSR	11 MAY	HAY	
- 1	- 1	14968	USSR		1	
		14986	USSR			
1984 0440		14987	USSR	11 MAY	31 MAY A4	
		06641		- 1	*	
	COSMOS 1552	14971	USSR	14 MAY	AON :	
1984 0458 1984 0450		15379	USSR	14 HAY	4 NON 4	
-1		15380	USSR	- XXX 47		
		15381	USSR		NON	
1984 0470		14980	USSR		21 HAY 84	

A LANCHES (CINT.)   NAME   N	NATIONAL						
ALUNCHES (CONT.)   ALUNCHES (C	ESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAY	NOTES
14983   USSR   22 MAY   26 MAY 84   15924   USSR   22 MAY   6 JUN 84   15925   USSR   22 MAY   6 JUN 84   15925   USSR   22 MAY   6 JUN 84   15925   USSR   22 MAY   6 JUN 84   15925   USSR   22 MAY   6 JUN 84   15925   USSR   22 MAY   6 JUN 84   15925   USSR   22 MAY   6 JUN 84   15925   USSR   22 MAY   6 JUN 84   15925   USSR   25 MAY   28 MAY   8 JUN 84   USSR   25 MAY   28 MAY   8 JUN 84   USSR   USS							
Colored   Colo	1		14983	USSR		HAY	
Colored   Colo			15024	USSR	- 1	2 5	
1990   1990	- 1		15025	USSR	- 1	₹	
1994   1994   1988   25 HAY 25 HAY 64-15-15-15-15-15-15-15-15-15-15-15-15-15-		COSMUS 1558	14993	4550	ł	2	
CONTROL   1568   1591			14994	USSR		MAY	
1994   1998   1991   1988   1991   1988   1991   1988   1991   1988   1991   1988   1991   1988   1991   1988   1991   1988   1991   1988   1991   1988   1991   1988   1991   1988   1991		1 10011033 65	14997	8551		=	
1944   1940   1961   1962   1968   1961   1968   1961   1968   1962   1968	- 1		15010	USSR		¥ ?	
CONTROL   CONT			15011	USSR		Š	
1946   1967			15021	USSR	1 JUN	ا ا ا	
1994   1994			15041	USSR	1 JUN	<u>}</u>	
15045   1504			15044	USSR	1 JUN		
150   150	- 1		15045	USSR	T JUN	¥	
D94H   15050   USSR   1 JUN   13 JUL 84	1		15040	COUR	T JUN		
1508   1502   1503   1508   1502   1508   1502   1508   1502   1508   1502   1508			15050	USSR	NOF T	ב	
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058A COSHUS 1571 15035 USSR 11 JUN 26 JUN 84 058B 15937 USSR 11 JUN 26 JUN 84 058B 15938 USSR 11 JUN 27 JUN 84 058B 15965 USSR 11 JUN 27 JUN 84 058B 15965 USSR 11 JUN 27 JUN 84 058B 15965 USSR 11 JUN 27 SEP 84 058B 15967 USSR 11 JUN 27 SEP 84 069B 15967 USSR 11 JUN 27 SEP 84 069B 15967 USSR 15 JUN 27 JUN 88 069B 159B 15987 USSR 15 JUN 27 JUN 88 069B 159B 159B 159B 159B 159B 159B 159B 15		٧F	15034	0811 8880	- 1	25	<u>-</u> م
15038   1503		- 1	15036	USSR	· •	<u>`</u>	יא (
15065   15065   15066   1506			15038	SSR	11 JUN	ے ج ا	'በስ
15068   15069   15089   15089   15089   15089   15089   15087   15089   15087   1508	- 1		15066	USSR	NOT 11	S C	לבו
1588   15069   USSR   11 JUN   22 SEP 84   15069   USSR   15 JUN   29 JUN 84   15069   USSR   15 JUN   29 JUN 84   15060   USSR   15 JUN   30 JUL 84   15060   USSR   15 JUN   30 JUL 84   USSR   15 JUN   30 JUL 84   USSR   15 JUN   30 JUL 84   USSR   15 JUN   30 JUL 84   USSR   15 JUN   13 JUL 84   USSR   15 JUN   13 JUL 84   USSR   17 JUN   28 JUN 84   USSR   19 JUN   24 JUN 84   USSR   19 JUN   25 JUN 84   USSR   19 JUN   26 JUN 84   USSR   19 JUN   26 JUN 84   USSR   19 JUN   26 JUN 84   USSR   19 JUN   27 JUN 84   USSR   19 JUN   28 JUN 84   USSR   19 JUN   27 JUN 84   USSR   19 JUN   27 JUN 84   USSR   19 JUN   27 JUN 84   USSR   19 JUN   27 JUN 84   USSR   19 JUN   27 JUN 84   USSR   19 JUN   27 JUN 84   USSR   19 JUN   27 JUN 84   USSR   19 JUN   27 JUN 84   USSR   27 JUN   27 JUN 84   USSR   27 JUN   27 JUN 84   USSR   27 JUN   27 JUN 84   USSR   27 JUN   27 JUN 84   USSR   27 JUN   27 JUN 84   USSR   27 JUN   27 JUN 84   USSR   27 JUN   27 JUN 84   USSR   27 JUN   28 JUN 84   USSR   USSR   27 JUN   28 JUN 84   USSR   USSR   USSR   27 JUN   28 JUN 84   USSR   US	- 1		15068	N830	NOT II	Ę	u
060A   COSMOS 1572   15046   USSR   15 JUN   29 JUN   060B   150B7   USSR   15 JUN   30 JUN   060B   150B7   USSR   15 JUN   30 JUN   060B   150B7   USSR   15 JUN   30 JUN   060B   150B7   USSR   15 JUN   28 JUN   061B   150B7   USSR   19 JUN   28 JUN   061B   150B7   USSR   19 JUN   24 JUN   061B   150B7   USSR   19 JUN   21 JUN   061B   150B7   USSR   19 JUN   30 JUN   061B   USSR   19 JUN   30 JUN   061B   USSR   19 JUN   30 JUN   061B   USSR   19 JUN   30 JUN   061B   USSR   19 JUN   24 JUN   061B   USSR   19 JUN   27 JUN   28 JUN   061B   USSR   19 JUN   27 JUN   27 JUN   28 JUN   28 JUN   28 JUN   29	1		15069	USSR	11 JUN	SEP	ļ
15080   15087   153888   153888   15388   153888   15388   153888   153888   15388   15388   15388		15	15046	USSR		Ň	
15088   1508			15087	USSR	ŀ	کے کے ا	
061A     CBSM0S 1573     15051     USSR     19 JUN     28 JUN       061B     15052     USSR     19 JUN     24 JUN       061C     15082     USSR     19 JUN     15 JUL       061D     15083     USSR     19 JUN     15 JUN       061C     15084     USSR     19 JUN     30 JUN       061G     15084     USSR     19 JUN     30 JUN       061G     15089     USSR     19 JUN     24 JUN       063G     15059     USSR     22 JUN     24 JUN       064A     15089     USSR     22 JUN     24 JUN       064A     15089     USSR     22 JUN     23 JUN	- 1		15089	USSR	- 1	֓֞֝֞֜֝֝֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֡֓֓֓֡֓֓֓֓֓֡֡֓֓֡֓֡֡֡֡	
0610 15073 USSR 19 JUN 15 JUL 15082 USSR 19 JUN 30 JUN 15081 USSR 19 JUN 30 JUN 0616 USSR 19 JUN 30 JUN 0616 USSR 19 JUN 30 JUN 15084 USSR 19 JUN 30 JUN 5 JUL 0636 USSR 19 JUN 24 JUN 2636 USSR 22 JUN 24 JUN 0636 USSR 22 JUN 24 JUN 0636 USSR 22 JUN 24 JUN 0636 USSR 22 JUN 22 JUN 0644 COSMIS 1575	- 1	C05M05 1573	15051	USSR	- 1	<b>₽</b>	
0610 15082 USSR 19 JUN 15 JUL 16081 USSR 19 JUN 30 JUN 16081 USSR 19 JUN 30 JUN 16081 USSR 19 JUN 30 JUN 16081 USSR 19 JUN 30 JUN 5 JUL 16083 USSR 22 JUN 24 JUN 16084 USSR 22 JUN 24 JUN 16084 USSR 22 JUN 24 JUN 16084 USSR 22 JUN 24 JUN 16084 USSR 22 JUN 24 JUN 16084 USSR 22 JUN 24 JUN 16084 USSR 22 JUN 24 JUN 16084 USSR 22 JUN 24 JUN 16084 USSR 22 JUN 24 JUN 16084 USSR 22 JUN 24 JUN 16084 USSR 22 JUN 24 JUN 16084 USSR 22 JUN 24 JUN 16084 USSR 22 JUN 24 JUN 16084 USSR 22 JUN 24 JUN 16084 USSR 22 JUN 24 JUN 16084 USSR 22 JUN 24 JUN 16084 USSR 22 JUN 24 JUN 16084 USSR 25 JUN 27 JUN 16084 USSR 22 JUN 27 JUN 16084 USSR 22 JUN 27 JUN 16084 USSR 22 JUN 27 JUN 16084 USSR 22 JUN 27 JUN 16084 USSR 22 JUN 27 JUN 16084 USSR 22 JUN 27 JUN 16084 USSR 22 JUN 27 JUN 16084 USSR 22 JUN 27 JUN 16084 USSR 22 JUN 27 JUN 16084 USSR 22 JUN 28 JUN 16084 USSR 22 JUN 28 JUN 16084 USSR 22 JUN 28 JUN 16084 USSR 22 JUN 28 JUN 16084 USSR 22 JUN 28 JUN 16084 USSR 22 JUN 28 JUN 16084 USSR 22 JUN 28 JUN 16084 USSR 22 JUN 28 JUN 16084 USSR 28 JUN 28 JUN 16084 USSR 28 JUN 28 JUN 16084 USSR 28 JUN 28 JUN 16084 USSR 28 JUN 28 JUN 16084 USSR 28 JUN 28 JUN 16084 USSR 28 JUN 28 JUN 16084 USSR 28 JUN 28 JUN 16084 USSR 28 JUN 28 JUN 16084 USSR 28 JUN 28 JUN 16084 USSR 28 JUN 2			15079	COUR	l	2	
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0616     15085     USSR     19 JUN     5 JUL       0638     USSR     22 JUN     24 JUN       0644     CONNIC 1575     15069     USSR     22 JUN     22 JUN			15084	USSR	ł	کے و کے ا	
0636 CORMOS 1575 15060 USSR 22 JUN 22 JUN 0664 CORMOS 1575	- }		15058	USSR	Nφ	֓֞֝֞֝֟֝֓֞֟֝֟֝֓֓֓֓֟֝֓֓֓֟֟֓֓֓֓֓֓֓֟֝֓֓֓֓֟֝֓֓֓֓֓֓֡֡֡֝֟֓֓֓֓֡֡֡֡֝֡֓֓֡֡֡֡֡֓֓֡֡֡֡֡֡֡֡	
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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DECAL	MOLES
1984 LAUNCHES	ES (CONT.)					
1984 0640		15101	USSR	22 JUN	PUG	
1		15102	USSR	NIII: 66	12 JUL 84	
		15103	7550 1550	- 1	Н.	
1984 CO41		15063	Sn		OCT	
		15064	\$1		24 ALIC RA	
1984 066A	C0 SM0S 1576	15070	USSK		2	
1		C10C1	ACCO		אַל	
		15034	3550 1558		994	
		15328	USSR			
	1500	15050		- 1	19 dul 04	
1964 010A	COSMOS 1380	15091	USSR	30 JUN		
. !		2005	USSR	## PF	1.	
1084 0700		15093	USSR	30 JUN		
		15094	USSR	100 SE	<b>1</b> ₹	
1704 U/UE		15115	USSR			
- 1		15116	USSR	NA 96	99	
		15117	USSR			
ŀ		15118	U55R	NAP 06	<b>₹</b>	
		15096	USSR	ם ה ה	Y OC	
		15097	USSR		9 :	
	SOYUZ T-12	15119	USSR	17 JUL	29 JUL 84	
1984 0738		15120	7550	100 11	100	
1984 073C		15136	USSK	- 1		
1984 0730	1	04161	ACCO.		2 AUG 84	
	CDSMOS 1582	15151	7550 11558	- 1	1	
1		15150	USSR		_	
		25151	U55R	- 19 JUL		
1984 0740		15154	USSR			
- 1		15155	USSR	ł	•	
	CDSMDS 1583	15123	USSR		B AUG B4	
1		15154	USSK	70C 47	ALIG BA	
1984 075C		15125	USSK	- 1	** *** ***	
1984 0750		15126	A550	24 JUL 24		
1984 075E		70101	355	- 1	19 BEC 84	
1		15178	**************************************	24 JUL		
		15179	USSR	18. Z	1	
1984 0757		15180	USSR			
- 1		15131	U55R	l l	1	
		15132	USSR		29 JUL 84	
- 1		15185	USSK		13 4110 84	
		15186	SSS	27 JUL	200	
1984 076E		15181	AS CD			
1984 C76F		15191	U33K	100	- 1	
1004 0334	COSMOS 1585	74161	A250			
		F 1 - 1 -		10f. 14	רס פוסע מי	

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NATIONAL DESIGNATION	NAME	GATAL BG NUMBER	SOURCE	LAUNCH	DECAY
1984 LAUNCHES	(CONT.)				
•		15146	USSR	1 AUG	AUG
7 1		15149	USSR	2 AUG	7 SEP 84
0080		15162	JAPAN	2 AUG	
1984 0828	1961	15164	USSR		2
1984 0820		15238	USSR	6 AUG	SEP #
1984 082E		15240	USSR	6 AUG	
1		15243	HSSA	2 700	¥ 2
		15168	USSR		A S
0850		15184	USSR	- 1	SEP
0868	ר אטטאניטט בט	15194	USSR	- 1	A S
1984 0878	CUSMUS 1570	15198	USSR		1
- 1		15229	USSR	- 1	SEP
1		15231	USSR	- 1	
		15216	USSR	24 AUG	SEP
0900		15221	USSR		200
0928	6031103 1371	15233	USSR		5 SEP 84
		15290	USSR		120
_ ]		15294	USSR		SEP
092H		15296	USSR	30 AUG	1
0948	COSMOS 1592	15257	USSR	- 1	SEP
l.		15298	USSR	♦ SEP	SEP
1984 094E		15300	USSR	4 SEP	2
1984 094F		15302	USSR	4 SEP	SEP
Ţ		15268	USSR	7 SEP	
V860	PRC 16	15279	PRC		SEP
1984 0980		15285	ממר		ָם קור עור

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INTER- -NATIONAE DESIGNATION	ON NAME	<del>Catalûg</del> Number	SOURCE	LAUNCH	DECAY	NOTES
1984 LAUN	LAUNCHES (CONT.)					
	COSHOS 1597	15287	USSR	13 SEP	26 SEP 84	
		15320	USSR	l l	120	
İ		15321	US US	ı	NO.	
	COSMOS 1599	15318	USSR	!	200	
1	COSMOS 1600	15319	USSR	L.	11 OCT 84	
Į .		15325	USSR	_ [	1	
1984 103E 1984 103F		15361	USSR	27 SEP 27 SEP	17 DEC 84	
1984 1036 1984 103H		15964	USSR	27 SEP 27 SEP	26 DCT 84	
1984 1066	The state of the s	15336	USSR	Ι.	29 SEP 84	
		15951	USSR	ł	4	
-	1	15352	USSR	4 0CT		į
1984 1128	919 616	15502	USSR	31 OCT	28 MAR 85	<u>+</u>
1984 1120		15504	USSR	31 OCT	1 OCT 85	
		15508	USSR		ŧ	
	9	15511	USSR		MAR	•
ı	COSMUS 1608	15393	USSR	14 NOV		<b>.</b>
1984 1168 1984 116C		15394	USSR USSR	14 NOV	16 NOV 84	
1984 1178 1984 1178	CDSMDS 1609	15395 15396	USSR USSR	14 NOV 14 NOV	25 NOV 84	
1984 1176 1984 117F		15400 15410	USSR USSR	14 NOV	1 MAY 85	
1984 1176		15411	USSR	NOV +1	1 DEC 84	
- 1		15413	USSR	- 1	HAR	
		15418	USSR	14 NOV	30 DEC 84	
1984 117M		15421	USSR	14 NOV		
1984 117N	COSMOS 1611	15428	USSR	21 NOV	24 DEC 84	
- 1	1	15404	USSR	- 1	<b>★</b> 0×	
		15405	USSR	_		
1984 1208		15407	USSR	27 NOV	DEC	
1	COSMUS 1613	15414	USSR	1		
1984 1218		15415	USSR	29 NDV	12 DEC 84	
		15417	USSR		DEC	
1384 1214		15457	US5R	NON 62	13 APR 85	

LAUNCHES (CONT.)   15456   USSR 29 NOY 5 JUL 85   1214   1214   1245   USSR 29 NOY 5 JUL 85   1214   USSR 29 NOY 5 JUL 85   1214   USSR 29 NOY 5 JUL 85   USSR 29 NOY 5 JUL 85   USSR 29 NOY 6 JUL 85   USSR 29 NOY 6 JUL 85   USSR 29 NOY 12 HAY 85	INTER-		CATALOC				
LAUNCHES (CDNT.)  1216	DESIGNATION	NAME	NUMBER	SOURCE	AUNC	EC.	NOTE
1216   15458   15458   29 MOY   5 JUL   1214   1214   1244   12	ł	(CONT.					
1211   1540   1550			15458	USSR	ī	ביר	
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128E   V2 DESCENT CRAFT   15856   USSR   21 DEC   14 JUN   129C   VEGA 2 BALLOON   15857   USSR   21 DEC   17 JAN   129C   VEGA 2 BALLOON   15857   USSR   21 DEC   17 JAN   129C   VEGA 2 BALLOON   15857   USSR   16 JAN   22 HAY   USSR   USSR   JAN   15 JAN   USSR   USSR   JAN   15 JAN   JAN	1		15452	TANA	1		
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OO1C         15466         JAPAN         7 JAN         22 MAY           OO2A         COSMUS 1616         15467         USSR         9 JAN         15 JAN           OO2B         15468         USSR         9 JAN         15 JAN           OO2B         15478         USSR         16 JAN         21 MAR           OO4C         15478         USSR         16 JAN         21 MAR           OO5B         15478         USSR         16 JAN         21 MAR           OO5B         15498         USSR         16 JAN         20 JAN           OO5E         15498         USSR         16 JAN         22 JUL           OO5E         15509         USSR         16 JAN         22 JUL           OU5F         15485         USSR         16 JAN         22 JUL           OU5F         15485         USSR         16 JAN         26 MAY           OU7B         15486         USSR         16 JAN         26 MAY           OU7B         15486         USSR         18 JAN         20 JAN           OU7B         15486         USSR         18 JAN         20 JAN           OU7A         15486         USSR         18 JAN         21 JAN <tr< td=""><td></td><td>ES</td><td></td><td></td><td></td><td></td><td></td></tr<>		ES					
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007B     15485     USSR     18 JAN     20 JAN       007C     15486     USSR     18 JAN     19 JAN       008A     CUSMOS 1625     15492     YSSR     23 JAN     25 JAN       008B     STS 51C     15493     USSR     24 JAN     27 JAN       010A     STS 51C     15496     USSR     6 FEB     20 FEB       012A     COSMUS 1628     15515     USSR     6 FEB     21 FEB       012C     15560     USSR     6 FEB     21 FEB       012F     15570     USSR     6 FEB     31 MAY	1		15516	USSR.		F.E.B	
OUTC     15486     USSR     23 JAN     25 JAN       008A     CUSMOS 1625     15492     YSSR     23 JAN     24 JAN       008B     STS 51C     15496     USSR     24 JAN     27 JAN       012A     COSMUS 1628     15514     USSR     6 FEB     20 FEB       012B     15515     USSR     6 FEB     21 FEB       012C     15560     USSR     6 FEB     12 SEP       012F     15570     USSR     6 FEB     31 MAY			15485	USSR		L A	
008A     CUSMUS 1625     15492     135R     23 JAN     24 JAN       0008A     STS 51C     15496     USSR     24 JAN     27 JAN       0108A     STS 51C     15496     USSR     6 FEB     20 FEB       012A     COSMUS 1628     15515     USSR     6 FEB     21 FEB       012B     15560     USSR     6 FEB     12 SEP       012C     15560     USSR     6 FEB     31 MAY	- 1	- 1	15486	USSR.			
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DESIGNATION	NAME	NUMBER	SOURCE	LAUNCH	DĘCAY	NOTES
1985 LAUNCHES	(CONT.)					
1985 012J		15579	USSR	6 FEB		
1985 612K 1985 612L		15591	USSR	6 FEB	t .	
- 1		15575	USSR			
0160		15576	USSR		22 FEB 85	
1985 0178 1985 0178	CUSHUS 1630	15583	USSR	27 FEB	MAR	
<del>*610</del>	COSMOS 1632	15509	USSR	### .	15 HAR 85	
1985 0198		15590	USSK	1 MAR	Y A	
		1560	USSR	1 MAR	MAR	
- 1		15611	USSR		A 4 5	
	:	15612	USSR	1 MAR	20 MAR 85	
1985 024C		15628	USSR		MAR	
0.204	COSMOS 1643	15634	USSR		130	
0268		15635	USSR		MAR	
0274	COSMOS 1644	15636	USSK	2 400	21 ADD 96	
		15637	U33K	•		
1985 0270		15639	USSR			
		15640	USSR		APR	
		15648	USSR			
1985 UZTH		15651	ASSI.	3 APR	26 SEP 85	
1965 UZIR		15051		- 1	\$	
		15657	USSR	3 APR	_	
OZIN		15658	USSR	ł	\$	
028A	STS 510	15641	US	12 APR	19 APR 85	
1985 0294 CI	CUSMUS 1645	15646	USSR		HAY	
- 1		15667		•	*	
		15668	USSR		13 MAY 85	
1985 029E		15670	NCCD IICSR	16 APR	19 MAY 85	
- 1		15671	USSR	- 1	***	
		15654	USSR		19 APR 85	
93.50	1448	15656	USSR	25 APR	6 MAY 85	
	۱,	15660	USSR		APR	
		15672	USSR		MAY	
		15673	USSR	25 APK	CO TAN CC	
		156/4	USSK	- 1		
1985 0326		15676	USSR		MAY	
-		15662	USSR	ı	¥5	
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1576 1574 1366 1574 1366 1574 1367 1366 1574 1370 1370 1370 1370 1370 1370 1370 1370	, ,		15695	USSR		
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1370 037E 038A 038A 038C 038C 038C 039B 039B 039B 039B 039B 039C	: I		15747	USSR		- 1
038A COSMOS 1653 15701 038C 15790 038C 15790 038C 15790 038C 15791 038E 15792 038C 15794 039B 15794 039B 15795 039C 15880S 1654 15855 039C 15898 039C 1589	1985 0370		15700	USSR	į	17 MAY
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039F 15855 039G 15894 039H 15894 039K 15896 039K 15898 039M 15898 039M 15898 039N 15902 039P 15902 039R 15903 039R 15904 039R 15706 040B 15748 040B 15776 040C 1			15853	USSR		23 HAY
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LAUNCHES (CUNT.)  1446	DESIGNATION	NAME	NUMBER	SDURCE	LAUNCH	DEÇAY	NOTES
1986   1987   1988		(CONT					
0446	1		15848	USSR	NUL 7	JUL	
04466			15849	75CD	NIII Z	AUG	
15   10   15   15   10   15   10   15   10   15   10   10		•	15852	USSR 1558	ı		
1986   1986   1988	1	)	15819	USSR		S	
1982   1982   1983   19 JUN   15 JUN		- 1	15819	USSR	i i	\$	
0466         15867         USSR         11 JUN         25 DEC           0466         15867         USSR         11 JUN         25 DEC           0464         1567         USSR         11 JUN         24 JUN           0465         1568         USSR         21 JUN         24 JUN           0576         1569         USSR         21 JUN         24 JUN           0577         1560         USSR         21 JUN         24 JUN           0578         1560         USSR         21 JUN         24 JUN           0570         1560			15820	USSR		<b>S 1</b>	
OFFICE         COSTAIL         ""><td></td><td></td><td>15861</td><td>ACCO.</td><td>Ĺ.</td><td>000</td><td></td></th<>			15861	ACCO.	Ĺ.	000	
045.0         1567.2         USSR         15 Jim         14 Jim         14 Jim         14 Jim         14 Jim         14 Jim         14 Jim         14 Jim         14 Jim         14 Jim         14 Jim         14 Jim         14 Jim         14 Jim         24 Jim <td></td> <td></td> <td>12809</td> <td>033H</td> <td>L</td> <td>*</td> <td></td>			12809	033H	L	*	
948E         STS 516         17472         US         17 JUN         27 JUN	1		15670	USSR		JU.	
048E         SPARTAN         15831         US         20 JUN         24 JUN           049E         57ARTAN         15839         USSR         19 JUN         28 SEP           049C         15839         USSR         21 JUN         28 SEP           041B         15839         USSR         21 JUN         24 JUN           051B         15845         USSR         21 JUN         24 JUN           052C         15882         USSR         21 JUN         24 JUN           052L         15882         USSR         21 JUN         24 JUN           052L         15882         USSR         21 JUN         24 JUN           052L         15884         USSR         21 JUN         24 JUN           052L         15884         USSR         21 JUN         24 JUN           054         15884         USSR         21 JUN         24 JUN           054         15884         USSR         22 JUN         24 JUN <td>- 1</td> <td>515 515</td> <td>15823</td> <td></td> <td>- 1</td> <td>NO.</td> <td></td>	- 1	515 515	15823		- 1	NO.	
15829   USSR   15 UN   25 SEP   10 UN   25 SEP   10 UN   25 SEP   10 UN   25 SEP   10 UN   25 SEP   10 UN   25 SEP   10 UN   25 UN			15831	Sn		NOT	
0497         15829         USSR         118 JUN         28 JUN         28 JUN         28 JUN         28 JUN         28 JUN         29 JUN		- 1	15928	USSR	1		
0516         FREGRESS 24         15839         USSR         21 JUN         24 JUN           0526         15845         USSR         21 JUN         24 JUN           0526         15845         USSR         21 JUN         24 JUN           0527         15840         USSR         21 JUN         24 JUN           0526         15840         USSR         21 JUN         24 JUN           0527         15842         USSR         21 JUN         24 JUN           0524         15842         USSR         21 JUN         24 JUN           0524         15842         USSR         21 JUN         24 JUN           0552         15843         USSR         21 JUN         24 JUN           0552         15844         USSR         21 JUN         24 JUN           0554         15845         USSR         21 JUN         24 JUN           0554         15846         USSR         21 JUN         24 JUN           0554         15846         USSR         24 JUN         24 JUN           0554         15866         USSR         25 JUN         25 JUN           0546         15866         USSR         25 JUN         25 JUN      <			15829	USSR		SEP	
051B         15839         USSK         21 JUN         24 JUN         27 JUN         21 JUN         24 JUN         27 JUN         24 JUN         25 JUN         24 JUN         25 JUN         25 JUN         25 JUN         26 JUN         27 JUN         27 JUN         27 JUN         27 JUN         27 JUN         27 JUN         27 JUN         27 JUN         27 JUN         27 JUN         27 JUN         27 JUN         27 JUN         27 JUN         27 JUN         28 JUN         28 JUN         28 JUN         29 JUN	- 1		15838	055R	1		
052E         15845         USSR         21 JUN         24 JUN         25 JUN         25 JUN         25 JUN         25 JUN         25 JUN         25 JUN         25 JUN         26 JUN         26 JUN         26 JUN         26 JUN         26 JUN         26 JUN         26 JUN         26 JUN         26 JUN         26 JUN         26 JUN         26 JUN         26 JUN         26 JUN         26 JUN         26 JUN         27 JUN			15839	USSR		200	
0.52C         15845         U.SSR         21 JUN         27 JUN <td></td> <td></td> <td>15841</td> <td>455K</td> <td>ı</td> <td>NI</td> <td></td>			15841	455K	ı	NI	
0520         15800         USSR         21 JUN         19 JUL           0521         15882         USSR         21 JUN         19 JUL           0522         15882         USSR         21 JUN         19 JUL           0524         15882         USSR         21 JUN         24 JUL           0524         15884         USSR         21 JUN         24 JUN           0524         15884         USSR         21 JUN         24 JUN           0534         15846         USSR         21 JUN         24 JUN           0534         15860         USSR         22 JUN         24 JUN           0546         15860         USSR         22 JUN         24 JUN           0547         15860         USSR         22 JUN         24 JUN           0546         15860         USSR         22 JUN         24 JUN           0547         15886         USSR         22 JUN         24 JUN           0546         15886         USSR         22 JUN         24 JUN           0547         15886         USSR         22 JUN         24 JUN           0548         15889         USSR         25 JUN         24 JUN           0540			15845	USSK		2	
052E         15880         USSR         21 JUN         19 JUL           052C         15882         USSR         21 JUN         6 JUL           052C         15882         USSR         21 JUN         6 JUL           052J         15884         USSR         21 JUN         24 JUN           053B         15847         USSR         21 JUN         29 JUN           053B         15847         USSR         21 JUN         24 JUN           054C         USSR         22 JUN         24 JUN           054B         15860         USSR         26 JUN         24 JUN           054C         15860         USSR         26 JUN         24 JUN           054C         15860         USSR         26 JUN         20 JUL           054E         15886         USSR         26 JUN         20 JUL           054E         15886         USSR         26 JUN         20 JUL           057B         1587			94051	ACCO.		ALIG	
0524         15882         USSR         21 JUN         6 JUL           0524         15884         USSR         21 JUN         2 JUL           0524         15884         USSR         21 JUN         2 JUL           0524         15884         USSR         21 JUN         2 JUL           0534         15847         USSR         21 JUN         2 JUN           0536         15860         USSR         26 JUN         2 JUN           0546         15860         USSR         26 JUN         2 JUN           0547         15866         USSR         26 JUN         3 JUL           0546         15866         USSR         26 JUN         3 JUL           0547         15866         USSR         26 JUN         3 JUL           0548         1586         USSR         26 JUN         3 JUL           0574         15886         USSR         26 JUN         3 JUL           0574         15886         USSR         26 JUN         3 JUL           0574         15886         USSR         26 JUN         3 JUL           0574         1587         USSR         3 JUL         25 JUN           0576         1591 <td></td> <td></td> <td>15880</td> <td>USSK 1660</td> <td>. I</td> <td>2</td> <td></td>			15880	USSK 1660	. I	2	
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0536         COSMOS 1664         15847         USSR         21 JUN         24 JUN           0538         15847         USSR         21 JUN         24 JUN           0546         USSR         20 JUN         21 JUN         24 JUN           0546         USSR         26 JUN         3 JUL         10 JUN           0547         USSR         26 JUN         3 JUL         10 JUN           0546         USSR         26 JUN         3 JUL         10 JUN           0578         USSR         3 JUL         10 JUN         25 JUN           0570         USSR         3 JUL         4 JUN         25 JUN      <	ı		17,000	: ex		Ę	
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0546         USSR         26 JUN         30 JUN           054C         15866         USSR         26 JUN         30 JUN           054C         15886         USSR         26 JUN         10 JUL           054E         15886         USSR         26 JUN         20 JUL           054E         15886         USSR         26 JUN         30 JUL           054G         15888         USSR         26 JUN         30 JUL           054G         15888         USSR         26 JUN         30 JUL           057A         USSR         3 JUL         25 JUL           057B         USSR         3 JUL         25 JUL           057F         USSR         3 JUL         25 JUL           057H         USSR         3 JUL         29 JUL           057B <td></td> <td></td> <td>15860</td> <td>USSR</td> <td></td> <td>אַל</td> <td></td>			15860	USSR		אַל	
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	CE D		USSR	15998		1985 0778
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	3 6 033 C	27 AUG	44.5	15992	<del>\$15-511</del>	
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	200	1		15968		
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					S (CONT.)	1985 LAUNCHES
NOTES	DECAY	LAUNCH	SOURCE	NUMBER	NAME	DESIGNATION
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1985 LAUNCHES (	( CUNI . )					
_		16022	USSR	29 AUG	3 OCT 85	
1985 0776 1985 0776		16024	USSR	i	SEP	
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0773		16026	USSR	29 AUG	27 SEP 85	
1985 0788	cushus tory	16000	USSR		SEP	
469A	COSMOS 1601	16018	USSR		4	
0808		16019	USSR	6 SEP	10 SEP 85	
1985 0806		16059	USSR		SEP	
- 1		16060	USSR	þ	435	
081A	S0YUZ T-14	16051	USSR	17 SEP	21 NOV 85	
1985-0018		16055	USSR	19 SEP	SEP	
0000	- 1483	16056	USSR	19.564	P	
0838		16057	USSR		_	
1985 083E		16123	US5R	1	1	
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- 1		16090	USSR	ı	<b>ADX</b>	
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ŧ		16089	HS SB	27 SED	DEC	
		16161	7550 7580	•		
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092A	то .	16115	do Sin	16 001	30 OCT 85	
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1985 0950		16228	USSR		1 DEC 85	
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1985 0956		66301	U55R	ı	3 NOV 85	
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1985 1018		16212	USSR		0CT	
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1985 LAUNCHES (CONT.)	ES (CONT.)					
1985 103F		16225	USSR		•	
1		16226	#88B	28 061	1	
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1		16251	HSSN			
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	COSMOS 1705	16296	USSR			
1385 1118		16297	HS S R	3 066	19.056 85	
1985 111C		16305	USSR	3 DEC		
1985 115A	COSMOS 1708	16331	USSR	- 1	DEC	
		16360	855F	13 050	22 DEC 85	
		16426	9550	13 86		
		16428	USSR		DEC	
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‡ *	-SUCCESSTULLY ORBITED AND RECOVERED A MANNED SPACE VEHICLE. LUNAR IMPACI.
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44	1962 B-IOTA 1. ALL OBJECTS OF THIS SERIES HAVE DECAYED.
	ALL UBJECTS OF THIS SERIES HAVE DECAYED.
‡	<u>-168 UBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1965 BIRA.</u> ALL OBJECTS OF THIS SERIES HAVE DECAYED.
‡	OBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 196
	1965 U208 AND 1965 U20C. THE UBJECTS OF THIS SERIES THAT REMAIN IN ORBIT
* I	24 OBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1965 0884.
ž	ALL UBJECTS OF THIS SERIES HAVE DECAMED. ANNOUNCED DECAM ON VENUS.
*	15 OBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1965-112A. THE DALECTS OF THIS SEPTES THAT DEMAIN IN ADDIT SAN AS EDIAN IN THE LIST
	BAECTS IN BROITS
*	DEBRIS DISCOVERED IN ORBIT WHICH HAS NOT BEEN IDENTIFIED WITH ANY LAUNCH-
*	ANNOUNCED THAT SPACECRAFT LANDED ON THE MOON.
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	1966 0128 AND 1966 012C. ALL OBJECTS OF THIS SERIES HAVE DECAYED.
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	THE UBJECTS OF THIS SERIES THAT REMAIN IN ORBIT CAN BE FOUND IN THE LIST. OF OBJECTS IN ORBIT.
**	BBJECTS HAVE BEEN IDENTIFIED
*	ALL UBJECTS UP THIS SEKIES HAVE DECAYED.
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+	41 UBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN EXUNCHED WITH 1966-101AT ALL OBJECTS OF THIS SERIES HAVE DECAYED.
+7	15 OBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1966-10445
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	E OBJECTS OF THIS SERIES THAT REMAIN IN
A8*	IDENTIFIED AS HAVING BEEN L
	THE UBJECTS OF THIS SERIES THAT REMAIN IN ORBIT CAN BE FOUND IN THE LIST.
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2	S OF THIS SERIES HAVE
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+ o <b>t</b>	MANNEU SPACECKAFI

HAVE BEEN IDENTIFIED AS HAVING THE LUNAR HODULE, AND HAS RECOLD OR THIS SERIES THAT REMAIN IN THE LUNAR HODULE, AND HAS RECOLD AS HAVING OF THIS SERIES THAT REMAIN IN ORBIT.  IN ORBIT.  AND ORBIT.  IN ORBIT.	AJ* A MANNED SPACECRAFT  THE NOON IN THE LUN  AK* 3d UBJECTS HAVE BEEL  THE OBJECTS IN ORBIT  AL* 27 OBJECTS IN ORBIT  AL* 27 OBJECTS IN ORBIT  AH* A MANNED SPACECRAFT  IN SELENGCENTRIC OR  AN* A MANNED SPACECRAFT  RECOVERED ON THE EAL  AP* ANNOUNCED THAT SPACE  AAF* ANNOUNCED DECAY ON IN  AS\$ SUCCESSFULLY REI  AAF* ANNOUNCED DECAY ON IN  AAF* ANNOUNCED THAT SPACE  AAF* ANDUNCED DECAY ON IN  AAF* ANOUNCED DECAY ON IN  AAF* ANOUNCED THAT BEELD  AAF*	
AS HAVING BEEN LAUNCHED HITH 1969 021A- REMAIN IN DRBITE CAN BE FOUND IN THE LIS SFULLY CRBITED THE MODN, LANDED MAN ON BY HAS RECOVERED. AS HAVING BEEN LAUNCHED HITH 1969 029A. REMAIN IN ORBIT CAN BE FOUND IN THE LIS REMAIN IN ORBIT CAN BE FOUND IN THE LIS REMAIN IN ORBIT CAN BE FOUND IN THE LIS REMAIN IN ORBIT CAN BE FOUND IN THE LIS REMAIN IN ORBIT CAN BE FOUND IN THE LIS REMAIN IN ORBIT CAN BE FOUND IN THE LIS REMAIN IN ORBIT CAN BE FOUND IN THE LIS REMAIN IN ORBIT CAN BE FOUND IN THE LIS REMAIN IN ORBIT CAN BE FOUND IN THE LIS REMAIN IN ORBIT CAN HAVING BEEN LAUNCHED HITH 1971 07A. AS HAVING BEEN LAUNCHED HITH 1973 07A. AS HAVING BEEN LAUNCHED HITH 1973 07A. AS HAVING BEEN LAUNCHED HITH 1973 07A. AS HAVING BEEN LAUNCHED HITH 1973 07A. AS HAVING BEEN LAUNCHED HITH 1973 07A. AS HAVING BEEN LAUNCHED HITH 1973 07A. AS HAVING BEEN LAUNCHED HITH 1973 07A. AS HAVING BEEN LAUNCHED HITH 1973 07A. AS HAVING BEEN LAUNCHED HITH 1975 07A. AS HAVING BEEN LAUNCHED HITH 1975 07A. AS HAVING BEEN LAUNCHED HITH 1975 07A. AS HAVING BEEN LAUNCHED HITH 1975 07A. AS HAVING BEEN LAUNCHED HITH 1975 07A. AS HAVING BEEN LAUNCHED HITH 1975 07A. AS HAVING BEEN LAUNCHED HITH 1975 07A. AS HAVING BEEN LAUNCHED HITH 1975 07A. AS HAVING BEEN LAUNCHED HITH 1975 07A. AS HAVING BEEN LAUNCHED HITH 1975 07A. AS HAVING BEEN LAUNCHED HITH 1975 07A. AS HAVING BEEN LAUNCHED HITH 1975 07A. AS HAVING BEEN LAUNCHED HITH 1975 07A. AS HAVING BEEN LAUNCHED HITH 1976 07A. AS HAVING BEEN LAUNCHED HITH 1976 07A. AS HAVING BEEN LAUNCHED HITH 1976 07A. AS HAVING BEEN LAUNCHED HITH 1976 07A. AS HAVING BEEN LAUNCHED HITH 1976 07A. AS HAVING BEEN LAUNCHED HITH 1976 07A. AS HAVING BEEN LAUNCHED HITH 1976 07A. AS HAVING BEEN LAUNCHED HITH 1976 07A. AS HAVING BEEN LAUNCHED HITH 1976 07A. AS HAVING BEEN LAUNCHED HITH 1976 07A. AS HAVING BEEN LAUNCHED HITH 1976 07A. AS HAVING BEEN LAUNCHED HITH 1976 07A. AS HAVING BEEN LAUNCHED HITH 1976 07A. AS HAVING BEEN LAUNCHED HITH 1976 07A. AS HAVING BEEN LAUNCHED HITH 19776 07A. AS HAVING BEEN LAUNCHED HITH 19776 07A. AS HAVI	A MANNED SPACECRAFT WHICH SUCCESSFULLY RECOVERED THAT SERIES THATE OBJECTS IN ORBIT.  OF OBJECTS HAVE BEEN IDENTIFIED THE OBJECTS IN ORBIT.  OF OBJECTS HAVE BEEN IDENTIFIED THE OBJECTS IN ORBIT.  A MANNED SPACECRAFT WHICH SUCCESA THATE SPACECRAFT LANDER RECOVERED ON THE EARTH.  A CHANNED SPACECRAFT WHICH PASSED RELENDER FARTH AND CED THAT SPACECRAFT LANDER RECOVERED IN ORBIT WHICH ANNOUNCED THAT SPACECRAFT LANDER DEBRIS OF THIS SERIES HAVE BEEN IDENTIFIED ALL OBJECTS HAVE BEEN IDENTIFIED ALL OBJECTS HAVE BEEN IDENTIFIED ALL OBJECTS HAVE BEEN IDENTIFIED ALL OBJECTS HAVE BEEN IDENTIFIED ALL OBJECTS HAVE BEEN IDENTIFIED ALL OBJECTS HAVE BEEN IDENTIFIED ALL OBJECTS HAVE BEEN IDENTIFIED ALL OBJECTS OF THIS SERIES HAVE BALL OBJECTS HAVE BEEN IDENTIFIED ALL OBJECTS OF THIS SERIES HAVE BEEN IDENTIFIED ALL OBJECTS HAVE BEEN IDENTIFIED ALL OBJECTS HAVE BEEN IDENTIFIED ALL OBJECTS HAVE BEEN IDENTIFIED ALL OBJECTS OF THIS SERIES HAVE BEEN IDENTIFIED ALL OBJECTS OF THIS SERIES HAVE BEEN IDENTIFIED ALL OBJECTS OF THIS SERIES HAVE BEEN IDENTIFIED ALL OBJECTS OF THIS SERIES HAVE BEEN IDENTIFIED ALL OBJECTS OF THIS SERIES HAVE	HAVE BEEN IDENTIFIED S OF THIS SERIES THAT IN ORBIT.
	AS HAVING BEEN LAUNG DECAYED.  AS HAVING BEEN LAUNG REMAIN IN ORBIT CAN REMAIN IN ORBIT CAN REMAIN IN ORBIT CAN REMAIN IN ORBIT CAN REMAIN IN ORBIT CAN REMAIN IN ORBIT CAN REMAIN IN ORBIT CAN REMAIN IN ORBIT CAN RETURN THE MOON, RETURN DAS HAVING BEEN LAUNG DECAYED.  AS HAVING BEEN LAUNG DECAYED.  AS HAVING BEEN LAUNG DECAYED.  AS HAVING BEEN LAUNG DECAYED.  AS HAVING BEEN LAUNG DECAYED.  AS HAVING BEEN LAUNG DECAYED.  AS HAVING BEEN LAUNG DECAYED.  AS HAVING BEEN LAUNG DECAYED.  AS HAVING BEEN LAUNG DECAYED.  AS HAVING BEEN LAUNG DECAYED.	AS HAVING BEEN LAUNG REMAIN IN ORBIT CAN

# FOUTNOTES (CONT)

2	AND THE PERSON IN THE BEEN TO THE TANK BEEN THINKING HE WAS ALL TO THE
	ALL OBJECTS OF THIS SERIES HAVE DECAYED.
+ =	<u>-ANNUUNCED THAT SPACECRAFT RETURNED TO EARTH FROM THE MOON AND WAS</u> SUCCESSFULLY RECOVERED.
****	
4140	ALL OBJECTS OF THIS SERIES HAVE DECAYED.
1	ALL OBJECTS OF THIS SERIES HAVE DECAYED.
*40	DECAYED.
* 000 * 000	AS HAVING BEEN LAUNCHED WITH 1977 DECAYED.
+ <del>*</del>	AS HAVING DECAYED.
#5 <del>8</del>	27 OBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1980 047A. ALL OBJECTS OF THIS SERIES HAVE DECAYED.
#18 80*	SUCCESSFUL EARTH ORBIT AND EARTH LANDING OF HANNED SPACECRAFT. 24 OBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1980 0674.
8V*	26 DBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1981 0974.
	THE UBJECTS OF THIS SERIES THAT KEMAIN IN URBIT CAN BE FOUND IN THE LIST OF OBJECTS IN ORBIT.
****	-25 OBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1982 007A:
8X#	UN DBJECTS IN UNDITY. 169 OBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1982 033A.
	ARBOUT TO UNEXTRACTED STATE TO SAULT OF LIFE CONTROL OF
	CAN BE FOUND IN THE LIST OF OBJECTS IN ORBIT.
*16	24 UBJECTS HAVE BEEN IDENTIFIED AS HAVING BEEN LAUNCHED WITH 1982 CYGA. ALL DBJECTS IN THIS SERIES HAVE DECAYED.
#79	133 OBJECTS HAVE BEEN I DENTIFIED AS HAVING BEEN LAUNCHED WITH 1982 COBATTHE OBJECTS OF THIS SERIES THAT REMAIN IN ORBIT CAN BE FOUND IN THE LIST
CA*	UP UBJECTS IN UNBIL: 1984 0118 (WESTAR 6) WAS RECOVERED BY 1984 1134 (STS 51A) ON
<b>+</b> 8℃	1984 0110 (PALAPA B2) WAS RECOVERED BY 1984 113A (STS 51A) ON
*33	SUFT LANDED ON VENUS
A N N N N	NO NATIONAL NAME.

ORIGINAL PAGE IS OF POOR QUALITY